

108TH CONGRESS }  
2d Session

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{ REPORT  
108-260

**NATIONAL DEFENSE AUTHORIZATION  
ACT FOR FISCAL YEAR 2005**

**REPORT**

[TO ACCOMPANY S. 2400]

ON

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2005 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

TOGETHER WITH

ADDITIONAL VIEWS

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COMMITTEE ON ARMED SERVICES  
UNITED STATES SENATE



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## Calendar No. 503

108TH CONGRESS }  
2d Session }

SENATE

{ REPORT  
108-260

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AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 2005 FOR MILITARY ACTIVITIES OF THE DEPARTMENT OF DEFENSE, FOR MILITARY CONSTRUCTION, AND FOR DEFENSE ACTIVITIES OF THE DEPARTMENT OF ENERGY, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR FOR THE ARMED FORCES, AND FOR OTHER PURPOSES

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MAY 11, 2004.—Ordered to be printed

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Mr. WARNER, from the Committee on Armed Services,  
submitted the following

### R E P O R T

together with

### ADDITIONAL VIEWS

[To accompany S. 2400]

The Committee on Armed Services reports favorably an original bill to authorize appropriations during the fiscal year 2005 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, and for other purposes, and recommends that the bill do pass.

### PURPOSE OF THE BILL

This bill would:

- (1) authorize appropriations for (a) procurement, (b) research, development, test and evaluation, (c) operation and maintenance and the revolving and management funds of the Department of Defense for fiscal year 2005;
- (2) authorize the personnel end strengths for each military active duty component of the Armed Forces for fiscal year 2005;
- (3) authorize the personnel end strengths for the Selected Reserve of each of the reserve components of the Armed Forces for fiscal year 2005;
- (4) impose certain reporting requirements;

(5) impose certain limitations with regard to specific procurement and research, development, test and evaluation actions and manpower strengths; provide certain additional legislative authority, and make certain changes to existing law;

(6) authorize appropriations for military construction programs of the Department of Defense for fiscal year 2005; and

(7) authorize appropriations for national security programs of the Department of Energy for fiscal year 2005.

### **Committee overview and recommendations**

The National Defense Authorization Act for Fiscal Year 2005 is being considered at a time when the United States and a coalition of nations are engaged in a war against terrorism on a global scale. Hundreds of thousands of soldiers, sailors, airmen, marines, and coast guardsmen—active, reserve, and National Guard—and, countless civilians who support military, diplomatic, and humanitarian operations, are serving valiantly in Iraq, Afghanistan, and other locations to secure hard-won military successes, to preserve peace and freedom, and to continue the fight against the scourge of terrorism. The U.S. Armed Forces, serving around the world, are truly the first line of defense in the security of the U.S. homeland.

The committee is ever mindful of the risks U.S. Armed Forces face everyday, and of the sacrifices made by the families and communities that support them. The men and women in uniform have been asked to do much in the past year, and they have responded in the finest traditions of the generations of Americans that preceded them. The American people are proud of their Armed Forces for what they have accomplished, and for the manner in which they represent American values and the compassion of America. The security of the United States, its allies, and its interests are in very capable, very professional hands.

While recent successes have been reassuring, there is no room for complacency. A recurring lesson of military operations is that national security threats are ever-changing and persistent. Victory and success must be accompanied by vigilance. The men and women of the Armed Forces are being called upon to perform difficult, dangerous missions today, and they will be called upon again for new, potentially more dangerous missions. They must be ready.

In order to meet the comprehensive defense needs of the 21st Century, the U.S. Armed Forces must be technologically advanced, fully integrated forces that can rapidly and decisively reach the far corners of the world to deter, disrupt, or defeat those who threaten the United States, its interests overseas, and its friends and allies. Winning the global war on terrorism and defending the homeland must be the highest priorities, but the U.S. Armed Forces must simultaneously prepare for the future. The modernization and transformation of America's Armed Forces is achievable and necessary, if the U.S. military is to be prepared for current and future responsibilities. The President's budget request for defense for fiscal year 2005 continues the real increases in defense spending of recent years to sustain readiness, enhance the quality of life of military personnel and their families, and modernize and transform the U.S. Armed Forces to meet current and future threats.

Since the beginning of the second session of the 108th Congress, the Committee on Armed Services of the Senate has conducted 45



hearings and received numerous policy and operational briefings on the President's budget request for fiscal year 2005 and related defense issues. As a result of these deliberations, the committee identified six priorities to guide its work on the National Defense Authorization Act for Fiscal Year 2005:

- (1) provide our men and women in uniform with the resources, training, technology, equipment, and authorities they require to combat terrorism and win the global war on terrorism, with particular focus on supporting the conduct of military operations in Iraq and Afghanistan;

- (2) enhance the ability of the Department of Defense to fulfill its homeland defense responsibilities by providing the resources and authorities necessary for the Department to assist in protecting our Nation against all current and anticipated forms of attack;

- (3) continue the committee's commitment to sustaining and improving the quality of life for the men and women of the Armed Forces—Active, Reserve, National Guard, and retired—and their families, including appropriate recognition for those called to serve in combat zones or other areas of increased danger;

- (4) sustain the readiness of our Armed Forces to conduct the full range of military operations against all current and anticipated threats;

- (5) support the Department's efforts to develop the innovative, forward-looking capabilities necessary to modernize and transform the Armed Forces to successfully counter future threats, particularly by enhancing our technology in areas such as unmanned systems; and

- (6) continue active committee oversight of Department programs and operations, particularly in the areas of acquisition reform and contract management, to ensure proper stewardship of taxpayers' dollars.

In order to fund these priorities, the committee recommends \$422.2 billion for defense programs for fiscal year 2005, an increase of \$20.9 billion above the amount authorized by the Congress for fiscal year 2004. This represents an increase of 3.4 percent in real terms for defense. The committee's recommendations address only normal operations of the Department, and do not include funding for ongoing operations in Iraq and Afghanistan.

The committee's first priority was to provide the Department of Defense with the resources and authorities it needs to combat terrorism and win the global war on terrorism. In these areas, the committee authorizes an increase of almost \$1.2 billion over the budget request. Funding highlights for ground forces include: \$1.2 billion for helicopters to replace aircraft damaged or beyond their service life, in order to get needed lift and attack helicopters to troops in the field; \$272.2 million for aircraft survivability equipment to ensure all aircraft used in combat operations have the best possible protection; \$905 million to continue procuring the Stryker armored vehicles that are already proving valuable in military operations in Iraq; and, almost \$1.1 billion, an increase of \$927.2 million, to accelerate procurement of up-armored HMMWVs, as well as add-on ballistic armor for medium and heavy trucks, to protect our troops on patrol in hostile environments. To improve the ability of

special operations forces, a major component of the war on terror, the committee authorizes an increase of \$65.4 million above the President's budget request to accelerate the availability of important new capabilities.

For naval forces, the committee authorizes an increase of \$150.0 million to accelerate fielding of an amphibious assault ship that will greatly improve the mobility and lethality of the Marine Corps, increased the amount requested for amphibious assault vehicles by \$23.2 million, and added almost \$50 million for personal protection equipment. Overall, the committee added over \$600 million for force protection gear and combat clothing, such as improved body armor, to meet urgent requirements of the armed services. The committee fully supports the budget request of \$2.9 billion for C-17 aircraft to improve the global mobility of U.S. forces.

To enhance the Department's homeland defense capabilities, the committee fully supports the President's budget request and authorizes: an additional \$46.9 million to complete the fielding of 55 Weapons of Mass Destruction-Civil Support Teams that provide defense support to local and regional first responders in every State and territory of the United States; an additional \$33.9 million for innovative technologies to combat terrorism and defeat emerging asymmetric threats; and \$26.5 million for development and fielding of chemical and biological agent detection and protection technologies. To protect America from ballistic missile threats, the committee authorizes \$10.2 billion for missile defense.

The committee continues its commitment to improve the quality of life of the men and women in uniform, and their families, by authorizing a 3.5 percent across-the-board pay raise for all uniformed service personnel, as well as increases in housing allowances that, combined with similar increases over the past 4 years, will, based on surveys of local housing costs, eliminate average out-of-pocket expenses for off-base housing for service members. The committee has authorized a permanent increase in the monthly family separation allowance from \$100 per month to \$250 per month that was implemented in 2003. Similarly, the committee has authorized a permanent increase, from \$150 a month to \$225 a month, for special pay for duty subject to hostile fire or imminent danger. The committee supports the initiatives taken by the Department to increase the pay of troops whose tours of duty have been extended for more than 12 months in Iraq. The committee also includes provisions that build on advances in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136), by authorizing a new health care option which would make TRICARE coverage available to members of the Selected Reserve and their families.

On February 25, 2004, the Subcommittee on Personnel of the Committee on Armed Services of the Senate conducted a hearing in response to reports of sexual assaults against women in the Armed Forces, at which the Under Secretary of Defense for Personnel and Readiness and the Vice Chiefs of Staff of the military Services testified. As a result of this hearing and other information collected by the committee, the committee included a provision that would require the Secretary of Defense to issue a uniform, comprehensive policy for the prevention of and response to sexual assaults involving members of the Armed Forces no later than January 1, 2005. The committee expects the Department to take the

findings and recommendations of its Task Force on Care for Victims of Sexual Assault and develop programs and policies that will measurably assist in preventing the incidence of sexual assault, improve criminal investigations, medical treatment, legal processing, and timely, easily accessible services for victims of sexual assault. Annual assessments of the implementation of policies and their effectiveness, to include extensive data collection, are mandated as a means to ensure ongoing oversight and zero tolerance of sexual assaults.

The committee approved the establishment of a Commission on the National Guard and Reserve that would carry out a study on the roles and missions of the National Guard and Reserve, and the compensation and benefits provided to members of the reserve components. The committee supports the transformational initiatives being taken by the Department and the military services to integrate the Active and Reserve components, and several provisions approved by the committee are aimed at enhancing the reserve continuum of service and recognition of the operational support provided by the Reserve.

The Administration requested \$9.4 billion for military construction and family housing. Due to pending realignments of overseas basing, the committee recommends adjusting the program to increase investment in installations in the United States, while at the same time sustaining a reduced, but prudent investment in overseas locations that will be of long-term value to the United States. The committee recommends an overall increase of \$342.4 million in military construction. Among the funding adjustments made by the committee are increases of more than \$100 million in critical unfunded projects identified by the military services, and an additional \$172.0 million to fund improvements to the facilities supporting our National Guard and Reserve forces.

Over the past several years, the committee has worked with the Department of Defense to ensure that necessary modernization, transformation, and long-range research are maintained, even in times of high operational tempo. The committee continues its support for these transformational activities, by authorizing \$3.5 billion for the Army's Future Combat System development, including \$497.6 million for the Non-Line-of-Sight Cannon program; \$131.1 million for tactical UAVs that have proven so valuable in recent military operations, an increase of \$30.6 million above the budget request; \$1.5 billion for the next generation DD(X) destroyer, including an increase of \$99.4 million to start detailed design of a second ship; and \$708.0 million for development of Joint Unmanned Air Combat Systems. The committee remains committed to the goals it set for the Department 4 years ago that one-third of deep strike aircraft be unmanned by the year 2010, and one-third of the ground combat vehicles be unmanned by the year 2015.

To ensure the continued development of cutting-edge technologies, the committee authorized more than \$11.0 billion for science and technology programs, an increase of \$445.0 million above the budget request. The committee recognizes that basic research is a force multiplier, and has increased funding in many areas, including force protection equipment and devices, counterterrorism technologies, information assurance, unmanned systems, and training innovations for the future defense force.

Over the past year, the American people have witnessed the extraordinary capabilities of the U.S. Armed Forces to deploy rapidly, fight with precision and professionalism, sustain and rotate the force, which included a movement of personnel and equipment not seen in such magnitude since World War II. The men and women in uniform have done a remarkable job and make the very difficult appear routine. Clearly, such efforts are not routine, and the ability of our forces to sustain their high tempo and accomplish their mission is a tribute to their pride, professionalism, and dedication to this Nation. The committee believes that the National Defense Authorization Act for Fiscal Year 2005 recognizes the service and sacrifice of our men and women in uniform and their families, sustains the advances made in recent years, and provides the necessary investments to prepare for the future.

#### **Explanation of funding summary**

The administration's budget request for the national defense function of the federal budget for fiscal year 2005 was \$418.8 billion, of which \$313.7 billion was for programs that require specific funding authorization. According to the estimating procedures used by the Congressional Budget Office (CBO), the amount requested was \$422.2 billion. The funding summary table that follows uses the budget authority as calculated by CBO.

The following table summarizes both the direct authorizations and equivalent budget authority levels for fiscal year 2005 defense programs. The columns relating to the authorization request do not include funding for the following items: pay and benefits for military personnel; military construction authorizations provided in prior years; and other small portions of the defense budget that are not within the jurisdiction of this committee, or that do not require an annual authorization.

Funding for all programs in the national defense function is reflected in the columns related to the budget authority request and the total budget authority implication of the authorizations in this bill.

The committee recommends funding for national defense programs totaling \$422.2 billion in budget authority. This funding level is consistent with the budget authority level of \$422.2 billion for the national defense function recommended in the Senate Concurrent Resolution on the Budget for Fiscal Year 2005 (S. Con. Res. 23).

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

## DIVISION A

### Title I -- PROCUREMENT

	<u>Authorization Request</u>	<u>Senate Change to Request</u>	<u>Senate Authorized</u>	<u>Budget Authority Implication Request</u>	<u>Senate</u>
Aircraft Procurement, Army	2,658,240	44,400	2,702,640	2,658,240	2,702,640
Missile Procurement, Army	1,398,321	90,000	1,488,321	1,398,321	1,488,321
Procurement of Weapons and Tracked Combat Vehicles, Army	1,639,695	53,900	1,693,595	1,639,695	1,693,595
Procurement of Ammunition, Army	1,556,902	41,400	1,598,302	1,556,902	1,598,302
Other Procurement, Army	4,240,896	1,143,400	5,384,296	4,240,896	5,384,296
Aircraft Procurement, Navy	8,767,867	102,965	8,870,832	8,767,867	8,870,832
Weapons Procurement, Navy	2,101,529	82,300	2,183,829	2,101,529	2,183,829
Procurement of Ammunition, Navy and Marine Corps	858,640	14,500	873,140	858,640	873,140
Shipbuilding and Conversion, Navy	9,962,027	165,000	10,127,027	9,962,027	10,127,027
Other Procurement, Navy	4,834,278	70,700	4,904,978	4,834,278	4,904,978
Procurement, Marine Corps	1,190,103	113,100	1,303,203	1,190,103	1,303,203
Aircraft Procurement, Air Force	13,163,174	-129,500	13,033,674	13,163,174	13,033,674
Procurement of Ammunition, Air Force	1,396,457		1,396,457	1,396,457	1,396,457
Missile Procurement, Air Force	4,718,313	-82,700	4,635,613	4,718,313	4,635,613
Other Procurement, Air Force	13,283,557	14,700	13,298,257	13,283,557	13,298,257
Procurement, Defense-wide	2,883,302	84,100	2,967,402	2,883,302	2,967,402
National Guard and Reserve Equipment					
Defense Production Act Purchases					
<b>Total Procurement</b>	<b>74,653,301</b>	<b>1,808,265</b>	<b>76,461,566</b>	<b>74,662,316</b>	<b>76,470,581</b>

### Title II -- RESEARCH, DEVELOPMENT, TEST & EVALUATION

Research, Development, Test & Evaluation, Army	9,266,258	420,700	9,686,958	9,266,258	9,703,958
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# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Request	Senate Implication
Research, Development, Test & Evaluation, Navy	16,346,391	333,000	16,679,391	16,346,391	16,679,391
Research, Development, Test & Evaluation, Air Force	21,114,667	149,600	21,264,267	21,114,667	21,264,267
Research, Development, Test & Evaluation, Defense-wide	20,739,837	-103,900	20,635,937	20,739,837	20,635,937
Operational Test & Evaluation, Defense	305,135	4,000	309,135	305,135	309,135
<b>Total Research, Development, Test &amp; Evaluation</b>	<b>67,772,288</b>	<b>803,400</b>	<b>68,575,688</b>	<b>67,772,288</b>	<b>68,592,688</b>
<b>Title III -- OPERATION AND MAINTENANCE &amp; OTHER PROGRAMS</b>					
Operation and Maintenance	26,133,411	172,200	26,305,611	26,133,411	26,305,611
Operation and Maintenance, Army	29,789,190	-86,400	29,702,790	29,789,190	29,702,790
Operation and Maintenance, Navy	3,632,115	50,612	3,682,727	3,632,115	3,682,727
Operation and Maintenance, Marine Corps	28,471,260	-1,047,700	27,423,560	28,471,260	27,423,560
Operation and Maintenance, Air Force	17,494,076	-40,500	17,453,576	17,494,076	17,453,576
Operation and Maintenance, Defense-wide	2,008,128	-82,400	1,925,728	2,008,128	1,925,728
Operation and Maintenance, Army Reserve	1,240,038		1,240,038	1,240,038	1,240,038
Operation and Maintenance, Navy Reserve	188,696	8,800	197,496	188,696	197,496
Operation and Maintenance, Marine Corps Reserve	2,239,790	-85,000	2,154,790	2,239,790	2,154,790
Operation and Maintenance, Air Force Reserve	4,440,686	-213,450	4,227,236	4,440,686	4,227,236
Operation and Maintenance, Army National Guard	4,422,838	-56,100	4,366,738	4,422,838	4,366,738
Operation and Maintenance, Air National Guard	1,305,336	44,650	1,349,986	1,305,336	1,349,986
Transfer Accounts	509,025	-30,000	479,025	509,025	479,025
Miscellaneous Appropriations					
<b>Subtotal Operation and Maintenance</b>	<b>121,874,589</b>	<b>-1,365,288</b>	<b>120,509,301</b>	<b>121,874,589</b>	<b>120,509,301</b>
<b>Other Programs</b>					
Drug Interdiction and Counter-Drug Activities, Defense	852,697		852,697	852,697	852,697

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Implication Request Senate
Defense Health Program	17,640,411	351,800	17,992,211	17,992,211
Office of the Inspector General	244,562	-80,000	164,562	164,562
Chemical Agents and Munitions Destruction, Army	1,371,990	147,000	1,518,990	1,518,990
Subtotal Other Programs	20,109,660	418,800	20,528,460	20,528,460
Revolving and Management Funds				
Defense Working Capital Funds (Army, Navy, Air Force, and Defense-wide)	510,886	-60,200	450,686	450,686
Defense Working Capital Funds - DeCA	1,175,000		1,175,000	1,175,000
National Defense Sealift Fund	1,269,252		1,269,252	1,269,252
National Defense Stockpile Transaction Fund				
Armed Forces Retirement Home	[61,195]		[61,195]	
Subtotal Revolving and Management Funds	2,955,138	-60,200	2,894,938	2,894,938
Total Operation and Maintenance & Other Programs	144,939,387	-1,006,688	143,932,699	143,932,699
MILITARY PERSONNEL	104,811,558	-276,100	104,535,458	104,535,458
Title X – GENERAL PROVISIONS				
General Transfer Authority (non-additive)	[4,000,000]	[-1,000,000]	[3,000,000]	
Inflation Savings		-1,670,000	-1,670,000	-1,670,000
Subtotal General Provisions		-1,670,000	-1,670,000	-1,670,000
DIVISION B				
MILITARY CONSTRUCTION				
Military Construction, Army	1,771,285	171,600	1,942,885	1,942,885
Military Construction, Navy	1,060,455	-78,490	981,965	981,965

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Implication Request	Senate
Military Construction, Air Force	663,964	113,005	776,969	663,964	776,969
Military Construction, Defense-wide	699,437	-17,100	682,337	709,337	692,237
Military Construction, Army National Guard	295,657	75,773	371,430	295,657	371,430
Military Construction, Air National Guard	127,368	87,050	214,418	127,368	214,418
Military Construction, Army Reserve	87,070	-24,023	63,047	87,070	63,047
Military Construction, Naval and Marine Corps Reserve	25,285		25,285	25,285	25,285
Military Construction, Air Force Reserve	84,556	14,650	99,206	84,556	99,206
Military Construction, Foreign Currency Fluctuations					63,000
Base Realignment and Closure IV	246,116		246,116	246,116	246,116
NATO Security Investment Program	165,800		165,800	165,800	165,800
Chem Agents and Munitions Destruction	81,886		81,886	81,886	81,886
<b>Subtotal Military Construction</b>	<b>5,308,879</b>	<b>342,465</b>	<b>5,651,344</b>	<b>5,318,779</b>	<b>5,724,244</b>
<b>FAMILY HOUSING</b>					
Family Housing Construction, Army	636,099		636,099	636,099	636,099
Family Housing Support, Army	928,907		928,907	928,907	928,907
Family Housing Construction, Navy and Marine Corps	139,107		139,107	139,107	139,107
Family Housing Support, Navy and Marine Corps	704,504		704,504	704,504	704,504
Family Housing Construction, Air Force	846,959		846,959	846,959	846,959
Family Housing Support, Air Force	863,896		863,896	863,896	863,896
Family Housing Construction, Defense-wide	49		49	49	49
Family Housing Support, Defense-wide	49,575		49,575	49,575	49,575
DoD Family Housing Improvement Fund	2,500		2,500	2,500	2,500
<b>Subtotal Family Housing</b>	<b>4,171,596</b>		<b>4,171,596</b>	<b>4,171,596</b>	<b>4,171,596</b>
<b>Total Military Construction and Family Housing</b>	<b>9,480,475</b>	<b>342,465</b>	<b>9,822,940</b>	<b>9,490,375</b>	<b>9,895,840</b>



# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Implication Request	Senate
<b>OTHER DoD MILITARY (Discretionary)</b>					
Receipts from Travel and Purchase Card Refunds					44,000
Armed Forces Retirement Home Fund	[61,195]		[61,195]		8,000
National Security Educational Trust Fund				8,000	15,000
Disposal of DoD Real Property				16,000	9,770
Lease of DoD Real Property				14,770	1,300
Overseas Facility Investment Recovery				1,300	5
National Science Center, Army				40,075	78,075
<b>Total Other DoD Military Discretionary</b>					
	401,657,009	1,342	401,658,351	401,715,999	401,835,341
<b>Subfunction (051) Department of Defense Discretionary</b>					
<b>OTHER DoD MILITARY (Mandatory)</b>					
Concurrent Receipt Accrual Payments to the Military Retirement Fund	1,534,200		1,534,200	1,534,200	1,374,200
Offsetting Receipts and Other	-1,386,000		-1,386,000	-1,386,000	-1,238,000
Revolving, Trust, and Other DoD Mandatory	273,000		273,000	883,010	762,010
National Defense Stockpile Transaction Fund, Public Enterprise Fund				-115,000	-80,000
Sale of Certain Materials in the National Defense Stockpile Transaction Fund	-115,000		-115,000	-115,000	-100,000
<b>Total Other DoD Military Mandatory</b>	148,200		148,200	148,200	136,200
<b>Subfunction (051) Department of Defense Mandatory</b>	306,200		306,200	916,210	718,210
<b>SUBFUNCTION (051) TOTAL DEPARTMENT OF DEFENSE MILITARY</b>	401,963,209	1,342	401,964,551	402,632,209	402,553,551

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

## DIVISION C

### ATOMIC ENERGY DEFENSE ACTIVITIES (053)

Energy Supply

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Implication Request	Senate
Weapons Activities	6,568,453	106,445	6,674,898	6,568,453	6,674,898
Defense Nuclear Nonproliferation	1,348,647		1,348,647	1,348,647	1,348,647
Naval Reactors	797,900		797,900	797,900	797,900
Office of the Administrator	333,700	10,000	343,700	333,700	343,700
Subtotal National Nuclear Security Administration	9,048,700	116,445	9,165,145	9,048,700	9,165,145
Defense Site Acceleration Completion	5,970,837	1,095	5,971,932	5,970,837	5,971,932
Defense Environmental Services	982,470		982,470	982,470	982,470
Other Defense Activities	663,636	-95,540	568,096	663,636	568,096
Defense Nuclear Waste Disposal	131,000	-23,000	108,000	131,000	108,000
Subtotal Environmental & Other Defense Activities	7,747,943	-117,445	7,630,498	7,747,943	7,630,498
Defense EM privatization (rescission)					
Subtotal Atomic Energy Defense Activities	16,796,643	-1,000	16,795,643	16,796,643	16,795,643
OTHER ATOMIC ENERGY DEFENSE ACTIVITIES (Discretionary)					
Defense Nuclear Facilities Safety Board	20,268	1,000	21,268	20,268	21,268
Corps of Engineers - Civil Works				140,000	140,000
Total Other Atomic Energy Defense Activities Discretionary	20,268	1,000	21,268	160,268	161,268
Subfunction (053) Atomic Energy Defense Activities Discretionary	16,816,911		16,816,911	16,956,911	16,956,911

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	<u>Authorization Request</u>	<u>Senate Change to Request</u>	<u>Senate Authorized</u>	<u>Budget Authority Implication Request</u>	<u>Senate</u>
<b>OTHER ATOMIC ENERGY DEFENSE ACTIVITIES (Mandatory)</b>					
Energy Employees Occupational Illness Compensation Program				262,000	341,000
Subfunction (053) Other Atomic Energy Defense Activities Mandatory				262,000	341,000
<b>SUBFUNCTION (053) TOTAL ATOMIC ENERGY DEFENSE ACTIVITIES</b>	<b>16,816,911</b>		<b>16,816,911</b>	<b>17,218,911</b>	<b>17,297,911</b>
<b>DEFENSE RELATED ACTIVITIES (054)</b>					
Department of Homeland Security				937,000	937,000
Department of Justice				530,000	530,000
Department of Transportation - MARAD Maritime Security Program				99,000	99,000
Intelligence Community Management Account				269,000	269,000
National Science Foundation - Antarctic Research Activities				68,000	68,000
Radiation Exposure Compensation Trust Fund Transferred to Mandatory				72,000	72,000
Selective Service System - Salaries and Expenses				26,000	26,000
Subfunction (054) Defense Related Activities Discretionary				2,001,000	2,001,000

# SUMMARY OF NATIONAL DEFENSE AUTHORIZATION FOR FY 2005

(Dollars in Thousands)

	Authorization Request	Senate Change to Request	Senate Authorized	Budget Authority Implication	
				Request	Senate
<b>OTHER DEFENSE RELATED ACTIVITIES (Mandatory)</b>					
CIA Retirement & Disability				239,000	239,000
Radiation Exposure Compensation Trust Fund				65,000	65,000
Proposed Legislation (outside DoD's Jurisdiction)				940,000	
<b>Subfunction (054) Defense Related Activities Mandatory</b>				1,244,000	304,000
<b>SUBFUNCTION (054) TOTAL DEFENSE-RELATED ACTIVITIES</b>				3,245,000	2,305,000
<b>Total National Defense Function (050) Discretionary</b>	418,473,920	1,342	418,475,262	420,673,910	420,793,252
<b>Total National Defense Function (050) Mandatory</b>	306,200		306,200	2,422,210	1,363,210
<b>TOTAL NATIONAL DEFENSE FUNCTION (050)</b>	418,780,120	1,342	418,781,462	423,096,120	422,156,462

**DIVISION A—DEPARTMENT OF DEFENSE  
AUTHORIZATIONS**

**TITLE I—PROCUREMENT**

**Explanation of tables**

The following tables provide the program-level detailed guidance for the funding authorized in title I of this Act. The tables also display the funding requested by the administration in the fiscal year 2005 budget request for procurement programs, and indicate those programs for which the committee either increased or decreased the requested amounts. As in the past, the administration may not exceed the authorized amounts (as set forth in the tables or, if unchanged from the administration request, as set forth in budget justification documents of the Department of Defense) without a re-programming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

**NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2005**  
(Dollars in Thousands)

<u>Title I – PROCUREMENT</u>	<u>Authorization Request</u>	<u>Senate Change</u>	<u>Senate Authorization</u>
Aircraft Procurement, Army	2,658,240	44,400	2,702,640
Missile Procurement, Army	1,398,321	90,000	1,488,321
Procurement of W&TCV, Army	1,639,695	53,900	1,693,595
Procurement of Ammunition, Army	1,556,902	41,400	1,598,302
Other Procurement, Army	4,240,896	1,143,400	5,384,296
Aircraft Procurement, Navy	8,767,867	102,965	8,870,832
Weapons Procurement, Navy	2,101,529	82,300	2,183,829
Procurement of Ammunition, Navy & Marine Corps	858,640	14,500	873,140
Shipbuilding and Conversion, Navy	9,962,027	165,000	10,127,027
Other Procurement, Navy	4,834,278	70,700	4,904,978
Procurement, Marine Corps	1,190,103	113,100	1,303,203
Aircraft Procurement, Air Force	13,163,174	-129,500	13,033,674
Procurement of Ammunition, Air Force	1,396,457		1,396,457
Missile Procurement, Air Force	4,718,313	-82,700	4,635,613
Other Procurement, Air Force	13,283,557	14,700	13,298,257
Procurement, Defense-Wide	2,883,302	84,100	2,967,402
National Guard and Reserve Equipment			
Defense Production Act Purchases			
<b>TOTAL PROCUREMENT</b>	<b>74,653,301</b>	<b>1,808,265</b>	<b>76,461,566</b>

**Subtitle A—Authorization of Appropriations**

**Subtitle B—Army Programs**

## (Dollars in Thousands)

(Dollars in Thousands)

[illegible]



**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>			<u>Senate</u>			<u>Senate</u>		
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Cost</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
2031	18	UH-60 MODS		156,389				10,000			166,389
		Crashworthy external fuel system for UH-60						[5,000]			
		UH-60 Blackhawk de-icing systems upgrade						[5,000]			
2031	18	LESS: ADVANCE PROCUREMENT (PY)		-13,500							-13,500
2031	19	ADVANCE PROCUREMENT (CY)		6,130							6,130
2031	20	KIOWA WARRIOR		39,276				6,000			45,276
		OH-58D Safety Enhancement Program - GAU-19 gun						[6,000]			
2031	21	AIRBORNE AVIONICS		49,091							49,091
2031	22	GATM ROLLUP		61,259							61,259
2031	23	AIRBORNE DIGITIZATION									
		Spares and Repair Parts									
2031	24	SPARE PARTS (AIR)		10,857							10,857
		Support Equipment and Facilities									
		Ground Support Avionics									
2031	25	AIRCRAFT SURVIVABILITY EQUIPMENT		7,319				10,000			17,319
		Additional AVR-2B						[10,000]			
2031	26	ASE INFRARED CM		272,165							272,165
		Other Support									
2031	27	AIRBORNE COMMAND & CONTROL		26,603				10,900			37,503
		A2C2S						[10,900]			
2031	28	AVIONICS SUPPORT EQUIPMENT		5,140							5,140
2031	29	COMMON GROUND EQUIPMENT		55,543							55,543
2031	30	AIRCREW INTEGRATED SYSTEMS		28,609				2,500			31,109
		Cockpit Airbag System (CABS)						[2,500]			
2031	31	AIR TRAFFIC CONTROL		55,449							55,449
2031	32	INDUSTRIAL FACILITIES		45,216							45,216
2031	33	LAUNCHER, 2.75 ROCKET		2,413							2,413

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
2031	34	AIRBORNE COMMUNICATIONS						
2031	35	CLOSED ACCOUNT ADJUSTMENT		9,769				9,769
		<b>Total - Aircraft Procurement, Army</b>		<b>2,658,240</b>		<b>44,400</b>		<b>2,702,640</b>
		<b>Missile Procurement, Army</b>						
		<b>Other Missiles</b>						
		<b>Surface-to-air Missile System</b>						
2032	1	PATRIOT SYSTEM SUMMARY	108	489,253	36	90,000	144	579,253
		PAC-3 missiles			[36]	[90,000]		
2032	2	STINGER SYSTEM SUMMARY		2,449				2,449
2032	3	SURFACE-LAUNCHED AMRAAM SYSTEM SUMMARY:						
		<b>Air-to-surface Missile System</b>						
2032	4	HELLFIRE SYS SUMMARY		108,475				108,475
2032	5	APKWS (ADVANCED PRECISION KILL WEAPON SYSTEM		755				755
2032	6	ADVANCE PROCUREMENT (CY)		6,124				6,124
		<b>Anti-tank/Assault Missile System</b>						
2032	7	JAVELIN (AAWS-M) SYSTEM SUMMARY	1,038	125,403	1,038			125,403
2032	7	LESS: ADVANCE PROCUREMENT (PY)		-7,600				-7,600
2032	8	ADVANCE PROCUREMENT (CY)		86,321			158	86,321
2032	9	LINE OF SIGHT ANTI-TANK (LOSAT) SYSTEM SUM	158	25,813			500	25,813
2032	10	TOW 2 SYSTEM SUMMARY	500	-12,946				-12,946
2032	10	LESS: ADVANCE PROCUREMENT (PY)		13,375				13,375
2032	11	ADVANCE PROCUREMENT (CY)		112,302			1,026	112,302
2032	12	GUIDED MLRS ROCKET (GMLRS)	1,026	112,302				112,302
2032	13	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR)	822	6,627			822	6,627
2032	14	MLRS LAUNCHER SYSTEMS		41,200				41,200

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Request	Cost	Qty	Change	Cost	Qty	Authorized	Cost
2032	15	HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS)	37		169,249				37		169,249
2032	16	ARMY TACTICAL MSL SYS (ATACMS) - SYS SUM	56		61,484				56		61,484
		<b>Modification of Missiles</b>									
		<b>Modifications</b>									
2032	17	PATRIOT MODS			87,948						87,948
2032	18	STINGER MODS									
2032	19	ITAS/TOW MODS			9,784						9,784
2032	20	MLRS MODS			18,970						18,970
2032	21	HIMARS MODIFICATIONS: (NON AAO)			474						474
2032	22	HELLFIRE MODIFICATIONS			9,770						9,770
		<b>Spares and Repair Parts</b>									
2032	23	SPARES AND REPAIR PARTS			33,779						33,779
		<b>Support Equipment and Facilities</b>									
2032	24	AIR DEFENSE TARGETS			5,843						5,843
2032	25	ITEMS LESS THAN \$5.0M (MISSILES)			10						10
2032	26	MISSILE DEMILITARIZATION									
2032	27	PRODUCTION BASE SUPPORT			3,459						3,459
2032	28	CLOSED ACCOUNT ADJUSTMENTS									
		<b>Total - Missile Procurement Army</b>			<b>1,398,321</b>			<b>90,000</b>			<b>1,488,321</b>
		<b>Procurement of Weapons and Tracked Combat Vehicles, Art</b>									
		<b>Tracked Combat Vehicles</b>									
2033	1	ABRAMS TRNG DEV MOD			3,643						3,643
2033	2	BRADLEY BASE SUSTAINMENT			71,378						71,378
2033	2	LESS: ADVANCE PROCUREMENT (PY)									
2033	3	BRADLEY FVS TRAINING DEVICES (MOD)			2,454						2,454

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u> <u>Cost</u>	<u>Qty</u>	<u>Change</u> <u>Cost</u>	<u>Qty</u>	<u>Authorized</u> <u>Cost</u>
2033	4	ABRAMS TANK TRAINING DEVICES		3,624				3,624
2033	5	STRYKER		905,074				905,074
		<b>Modification of Tracked Combat Vehicles</b>						
2033	6	CARRIER, MOD				15,000		15,000
		M113A2 OIF for Army prepositioned stocks				[15,000]		
2033	7	FIST VEHICLE (MOD)		1				1
2033	8	MOD OF IN-SVC EQUIP, FIST VEHICLE		670				670
2033	9	BFVS SERIES (MOD)		55,424				55,424
2033	10	HOWITZER, MED SP FT 155MM M109A6 (MOD)		18,350				18,350
2033	11	FAASV PIP TO FLEET		7,294				7,294
2033	12	IMPROVED RECOVERY VEHICLE (M88 MOD)						
2033	13	ARMORED VEH LAUNCH BRIDGE (AVLB) (MOD)						
2033	14	M1 ABRAMS TANK (MOD)		116,917				116,917
2033	15	SYSTEM ENHANCEMENT PGM: SEP M1A2	67	292,152			67	292,152
2033	16	ABRAMS UPGRADE PROGRAM						
		<b>Support Equipment and Facilities</b>						
2033	17	ITEMS LESS THAN \$5.0M (TCV-WTCV)		407				407
2033	18	PRODUCTION BASE SUPPORT (TCV-WTCV)		10,278				10,278
		<b>Weapons and Other Combat Vehicles</b>						
2033	19	INTEGRATED AIR BURST WEAPON SYSTEM FAMILY XM-8 - additional LRIP after fielding to BCTs		500		13,000		13,500
2033	20	ARMOR MACHINE GUN, 7.62MM M240 SERIES	2,070	25,249		[13,000]	2,070	25,249

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
2033	21	MACHINE GUN, 5.56MM (SAW) Rapid fielding initiative (Additional M249 Saws)		80				8,480
2033	23	MORTAR SYSTEMS	577	5,258			577	5,258
2033	24	M16 RIFLE						
2033	25	XM107, CAL. 50, SNIPER RIFLE	600	8,871			600	8,871
2033	26	5.56 CARBINE M4	8,255	9,376			8,255	9,376
2033	27	HOWITZER LT WT 155MM (T)	18	37,209			18	37,209
		<b>Modification of Weapons and Other Combat Vehicles</b>						
2033	28	MARK-19 MODIFICATIONS		4,236				4,236
2033	29	M4 CARBINE MODS		13,777				13,777
2033	30	SQUAD AUTOMATIC WEAPON (MOD) Rapid fielding initiative (Additional Saw items)		3,382				11,182
2033	31	MEDIUM MACHINE GUNS (MODS)		3,409				3,409
2033	32	HOWITZER, TOWED, 155MM, M198 (MODS)	13	779			13	779
2033	33	M119 MODIFICATIONS						
2033	34	M16 RIFLE MODS		2,345				2,345
2033	35	MODIFICATIONS LESS THAN \$5.0M (WOCV-WTCV)		3,245				3,245
		<b>Support Equipment and Facilities</b>						
2033	36	ITEMS LESS THAN \$5.0M (WOCV-WTCV)		486				486
2033	37	PRODUCTION BASE SUPPORT (WOCV-WTCV)		6,620				6,620
2033	38	INDUSTRIAL PREPAREDNESS		2,629				2,629
2033	39	SMALL ARMS (SOLDIER ENH PROG) Rapid fielding initiative (Magazines, sights, weapon packs)		3,492				13,192
2033	40	REF SMALL ARMS		998				998

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Qty	Cost	Change	Authorized
		Spares						
2033	41	SPARES AND REPAIR PARTS (WTCV)		20,088				20,088
		<b>Total - Procurement of WTCV, Army</b>		<b>1,639,695</b>		<b>53,900</b>		<b>1,693,595</b>
		<b>Procurement of Ammunition, Army</b>						
		<b>Ammunition</b>						
		<b>Small/Medium Caliber Ammunition</b>						
2034	1	CTG, 5.56MM, ALL TYPES		173,550				173,550
2034	2	CTG, 7.62MM, ALL TYPES		45,062				45,062
2034	3	CTG, 9MM, ALL TYPES		5,078				5,078
2034	4	CTG, .50 CAL, ALL TYPES		59,810				59,810
2034	5	CTG, 25MM, ALL TYPES		21,600				21,600
2034	6	CTG, 30MM, ALL TYPES		9,726				9,726
2034	7	CTG, 40MM, ALL TYPES		119,658				119,658
		<b>Mortar Ammunition</b>						
2034	8	60MM MORTAR, ALL TYPES		38,436				38,436
2034	9	81MM MORTAR, ALL TYPES		4,597				4,597
2034	10	CTG, MORTAR, 120MM, ALL TYPES		50,316				50,316
		<b>Tank Ammunition</b>						
2034	11	CTG TANK 105MM: ALL TYPES		27,419				27,419
2034	12	120MM TANK TRAINING, ALL TYPES		139,718				139,718
2034	13	CTG, TANK, 120MM TACTICAL, ALL TYPES		49,845				49,845
		<b>Artillery Ammunition</b>						
2034	14	CTG, ARTY, 75MM: ALL TYPES		33,286				33,286
2034	15	CTG, ARTY, 105MM: ALL TYPES		132,668				132,668
2034	16	CTG, ARTY, 155MM, ALL TYPES						

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
2034	17	PROJ 155MM EXTENDED RANGE XM982		16,960				16,960
2034	18	MODULAR ARTILLERY CHARGE SYSTEM (MACS), ALL 1		65,807				65,807
		<b>Artillery Fuzes</b>						
2034	19	ARTILLERY FUZES, ALL TYPES		40,796				40,796
		<b>Mines</b>						
2034	20	MINE, TRAINING, ALL TYPES		527				527
2034	21	MINES (CONVENTIONAL), ALL TYPES		4,242				4,242
2034	22	MINE AT VOLCANO.; ALL TYPES						
2034	23	MINE, CLEARING CHARGE, ALL TYPES		1,020				1,020
2034	24	ANTI-PERSONNEL LANDMINE ALTERNATIVES		15,222				15,222
		<b>Rockets</b>						
2034	25	SHOULDER FIRED ROCKETS, ALL TYPES		15,414				15,414
2034	26	ROCKET, HYDRA 70, ALL TYPES		164,689				164,689
		<b>Other Ammunition</b>						
2034	27	DEMOLITION MUNITIONS, ALL TYPES		29,193				29,193
2034	28	GRENADES, ALL TYPES		52,857				52,857
2034	29	SIGNALS, ALL TYPES		26,276				26,276
2034	30	SIMULATORS, ALL TYPES		20,165				20,165
		<b>Miscellaneous</b>						
2034	31	AMMO COMPONENTS, ALL TYPES		8,550				8,550
2034	32	NON-LETHAL AMMUNITION, ALL TYPES		5,534				5,534
2034	33	CAD/PAD ALL TYPES		3,884				3,884
2034	34	ITEMS LESS THAN \$5 MILLION		11,398				11,398

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
2034	35	AMMUNITION PECULIAR EQUIPMENT						
		Robotic dominated ammunition module		4,898				8,898
		Desert optimized equipment						[3,000]
2034	36	FIRST DESTINATION TRANSPORTATION (AMMO)		10,700				10,700
2034	37	CLOSEOUT LIABILITIES		80				80
2034		<b>Ammunition Production Base Support</b>						
		<b>Production Base Support</b>						
	38	PROVISION OF INDUSTRIAL FACILITIES		40,746				70,746
		120mm ext range mortar ammo flexible load, assembly, and pack						
		Flexible load, assemble and pack modern munitions enterprise						
		RDX nitration facility reactivation						
		Acid plant modernization						
	39	LAYAWAY OF INDUSTRIAL FACILITIES		2,315				2,315
	40	MAINTENANCE OF INACTIVE FACILITIES		4,745				4,745
	41	CONVENTIONAL MUNITIONS DEMILITARIZATION		95,372				102,772
		Conventional Ammunition Demilitarization						
		Missile recycling energetics processing module						
2034	42	ARMS INITIATIVE		4,743				4,743
<b>Total - Procurement of Ammunition, Army</b>				<b>1,556,902</b>				<b>1,598,302</b>
<b>Other Procurement, Army</b>								
<b>Tactical and Support Vehicles</b>								
<b>Tactical Vehicles</b>								
2035	1	TACTICAL TRAILERS/DOLLY SETS		11,940				11,940



# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Qty	Cost	Authorized	Cost
2035	2	SEMITRAILERS, FLATBED:						
		M871A3 semitrailers						
2035	3	SEMITRAILERS, TANKERS						
2035	4	HI MOB MULTI-PURP WHLD VEH (HMMWV)						
		Up-armored HMMWV production						
2035	5	TRUCK, DUMP, 20T (CCE)						
2035	6	FAMILY OF MEDIUM TACTICAL VEH (FMTV)						
2035	7	FIRETRUCKS & ASSOCIATED FIREFIGHTING EQUIPMENT						
2035	8	FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)						
		Additional vehicles						
		Movement Tracking System						
2035	8a	Wheeled Vehicle Ballistic Armor Protection						
		Up-armored HMMWVs or armor kits for trucks						
2035	9	ARMORED SECURITY VEHICLES (ASV)						
2035	10	TRUCK, TRACTOR, LINE HAUL, M915/M916						
		M915A3 family of military vehicles						
2035	11	TOWING DEVICE, 5TH WHEEL						
2035	12	TRUCK, TRACTOR, YARD TYPE, M878 (C/S)						
2035	13	HVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV I						
2035	14	MODIFICATION OF IN SVC EQUIP						
2035	15	ITEMS LESS THAN \$5.0M (TAC VEH)						
2035	16	TOWING DEVICE-FIFTH WHEEL						
		Non-tactical Vehicles						
2035	17	HEAVY ARMORED SEDAN						
2035	18	PASSENGER CARRYING VEHICLES						
2035	19	NONTACTICAL VEHICLES, OTHER						

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Request	Cost	Qty	Change	Cost	Qty	Authorized	Cost
		<b>Communications and Electronics Equipment</b>									
		<b>Comm-Joint Communications</b>									
2035	20	COMBAT IDENTIFICATION PROGRAM									
2035	21	JCSE EQUIPMENT (USREDCOM)			4,550						4,550
		<b>Comm-Satellite Communications</b>									
2035	22	DEFENSE SAT COMMUNICATIONS SYSTEM (SPACE)									
2035	23	SHF TERM			99,775						99,775
2035	24	SAT TERM, EMUT (SPACE)			30,621						30,621
2035	25	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE)			3,371						3,371
		Defense advanced GPS receiver			40,067			5,000			45,067
2035	26	SMART-T (SPACE)						[5,000]			
2035	27	SCAMP (SPACE)			73,354						73,354
2035	28	MILSTAR COMPONENTS (SPACE)			600						600
2035	29	GLOBAL BRDCST SVC - GBS			25,282						25,282
2035	30	MOD OF IN-SVC EQUIP (TAC SAT)			12,664						12,664
		<b>Comm-C3 System</b>			198						198
2035	31	ARMY GLOBAL CMD & CONTROL SYS (AGCCS)			19,790						19,790
		<b>Comm-Combat Communications</b>									
2035	32	ARMY DATA DISTRIBUTION SYSTEM (DATA RADIO)						7,000			41,435
		Enhanced position location reporting system			34,435			[7,000]			
2035	33	JTRS CLUSTER 1			121,452						121,452
2035	34	RADIO TERMINAL SET, MIDS LVT(2)			3,223						3,223
2035	35	SINCGARS FAMILY			48,614			12,500			61,114
		SINCGARS radios						[12,500]			
2035	36	MULTI-PURPOSE INFORMATION OPERATIONS SYSTEMS			7,776						7,776
2035	37	JOINT TACTICAL AREA COMMAND SYSTEMS			843						843
2035	38	ACUS MOD PROGRAM			81,317						81,317

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>
2035	39	COMMS-ELEC EQUIP FIELDING						
		Rapid fielding initiative (MBITR)		8,889		14,000		22,889
2035	40	SOLDIER ENHANCEMENT PROGRAM COMM/ELECTRON		25,952				25,952
2035	41	COMBAT SURVIVOR EVADER LOCATOR (CSEL)		28,767				28,767
2035	42	RADIO, IMPROVED HF FAMILY		6,948				6,948
2035	43	MEDICAL COMM FOR CBT CASUALTY CARE (MC4)		4,662				4,662
		<b>Comm-Intelligence Communications</b>						
2035	44	CI AUTOMATION ARCHITECTURE		1,279				1,279
		<b>Information Security</b>						
2035	45	TSEC - ARMY KEY MGT SYS (AKMS)		2,834				2,834
2035	46	INFORMATION SYSTEM SECURITY PROGRAM-ISSP		114,124				114,124
		<b>Comm-Long Haul Communications</b>						
2035	47	TERRESTRIAL TRANSMISSION		23,421				23,421
2035	48	BASE SUPPORT COMMUNICATIONS		40,564				40,564
2035	49	ARMY DISN ROUTER		6,133				6,133
2035	50	ELECTROMAG COMP PROG (EMCP)		469				469
2035	51	WW TECH CON IMP PROG (WWTCIP)		2,698				2,698
		<b>Comm-Base Communications</b>						
2035	52	INFORMATION SYSTEMS		268,940				268,940
2035	53	DEFENSE MESSAGE SYSTEM (DMS)		12,296				12,296
2035	54	LOCAL AREA NETWORK (LAN)		84,820				84,820
2035	55	PENTAGON INFORMATION MGT AND TELECOM		14,671				14,671
		<b>Elect Equip-Nat For Int Prog (NFIP)</b>						
2035	56	FOREIGN COUNTERINTELLIGENCE PROG (FCI)	[ ]	[ ]				
2035	57	GENERAL DEFENSE INTELL PROG (GDIP)	[ ]	[ ]				
		<b>Elect Equip-Tact Int Rel Act (TIARA)</b>						
2035	58	ALL SOURCE ANALYSIS SYS (ASAS) (TIARA)		15,979				15,979

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Request	Change	Authorized	Qty	Cost
2035	59	JTT/CIBS-M (TIARA)		13,993				13,993
2035	60	PROPHET GROUND (TIARA)		17,692				26,092
		Prophet Block 1 upgrades						
2035	61	TUAV		100,456	2	2	2	131,056
		TUAV lifecycle maintenance program						
		Additional Shadow TUAVs			[2]			[25,600]
2035	62	ARMY COMMON GROUND STATION (CGS) (TIARA)		9,138				9,138
2035	63	DIGITAL TOPOGRAPHIC SPT SYS (DTSS) (TIARA)						
2035	64	DRUG INTERDICTION PROGRAM (DIP) (TIARA)		14,094				14,094
2035	65	TACTICAL EXPLOITATION SYSTEM (TIARA)		9,575				9,575
2035	66	DCGS-A UNIT OF EMPLOYMENT (JMIP)		5,840				5,840
2035	67	TROJAN (TIARA)		2,594				2,594
2035	68	MOD OF IN-SVC EQUIP (INTEL SPT) (TIARA)		2,924				2,924
2035	69	CI HUMINT INFO MANAGEMENT SYS (CHIMS) (TIARA)		4,287				4,287
2035	70	ITEMS LESS THAN \$5.0M (TIARA)						
		<b>Elect Equip-Electronic Warfare (EW)</b>						
2035	71	SHORTSTOP						
2035	72	COUNTERINTELLIGENCE/SECURITY COUNTERMEASUR						
		<b>Elect Equip-Tactical Surv. (TAC SURV)</b>						
2035	73	FAAD GBS		7,487				7,487
2035	74	SENTINEL MODS		102,325				116,325
2035	75	NIGHT VISION DEVICES						
		Night vision device PVS-14						14,000
2035	76	LONG RANGE ADVANCED SCOUT SURVEILLANCE SYST		49,176				49,176
2035	77	LTWT VIDEO RECON SYSTEM (LWVRS)						
2035	78	NIGHT VISION, THERMAL WPN SIGHT		54,809				54,809
2035	79	ARTILLERY ACCURACY EQUIP						

**Title I - Procurement**  
(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Change	Authorized	Qty	Cost
2035	80	MOD OF IN-SVC EQUIP (MMS)	461					461
2035	81	MOD OF IN-SVC EQUIP (MVS)	280					280
2035	82	PORTABLE INDUCTIVE ARTILLERY FUZE SETTER	1,985					1,985
2035	83	PROFILER	4,963					8,363
		Meteorological measuring set - Profiler			3,400			
2035	84	MOD OF IN-SVC EQUIP (TAC SURV)	17,444		[3,400]			21,444
		AN/TPQ-36(V)8 radar processor replacement			4,000			
2035	85	FORCE XXI BATTLE CMD BRIGADE & BELOW (FBCB2)	120,073		[4,000]			120,073
2035	86	LIGHTWEIGHT LASER DESIGNATOR/RANGEFINDER	12,339					12,339
2035	87	MORTAR FIRE CONTROL SYSTEM	14,633					14,633
2035	88	INTEGRATED MET SYS SENSORS (IMETS) - TIARA	346					346
2035	89	ENHANCED SENSOR & MONITORING SYSTEM	1,456					1,456
		Elect Equip-Tactical C2 Systems						
2035	90	TACTICAL OPERATIONS CENTERS	50,692					50,692
2035	91	ADV FA TAC DATA SYS / EFF CTRL SYS (AFATDS/EC	26,922					26,922
2035	92	MOD OF IN-SVC EQUIP, AFATDS	3,990					3,990
2035	93	LIGHT WEIGHT TECH FIRE DIRECTION SYS (LWT)	2,018					2,018
2035	94	BATTLE COMMAND SUSTAINMENT SUPPORT SYSTEM (	11,909					11,909
2035	95	FAAD C2	12,873					12,873
2035	96	AIR & MSL DEFENSE PLANNING & CONTROL SYS (AMD	6,400					6,400
2035	97	FORWARD ENTRY DEVICE / LIGHTWEIGHT FED (FED/L	2,045					2,045
2035	98	KNIGHT FAMILY	2,236					2,236
2035	99	LIFE CYCLE SOFTWARE SUPPORT (LCSS)	1,827					1,827
2035	100	LOGTECH	24,416					24,416
2035	101	TC AIMS II	16,376					16,376
2035	102	GUN LAYING AND POS SYS (GLPS)						
2035	103	ISYSCON EQUIPMENT						

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>			<u>Senate</u>			<u>Senate</u>		
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Cost</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>	<u>Qty</u>
2035	104	JOINT NETWORK MANAGEMENT SYSTEM (JNMS)		12,587						12,587	
2035	105	TACTICAL INTERNET MANAGER		11,363						11,363	
2035	106	MANEUVER CONTROL SYSTEM (MCS)		29,136						29,136	
2035	107	STAMIS TACTICAL COMPUTERS (STACOMP)		54,581						54,581	
2035	108	STANDARD INTEGRATED CMD POST SYSTEM									
		<b>Elect Equip - Automation</b>									
2035	109	ARMY TRAINING MODERNIZATION		5,377						5,377	
2035	110	AUTOMATED DATA PROCESSING EQUIP		146,184			6,800			152,984	
		Active data-rich RFID for in-transit visibility					[6,800]				
2035	111	RESERVE COMPONENT AUTOMATION SYS (RCAS)		48,467						48,467	
		<b>Elect Equip-Audio Visual Sys (A/V)</b>									
2035	112	AFRTS		1,801						1,801	
2035	113	ITEMS LESS THAN \$5.0M (A/V)		1,624						1,624	
2035	114	ITEMS LESS THAN \$5M (SURVEYING EQUIPMENT)		2,298						2,298	
		<b>Elect Equip-Support</b>									
2035	115	PRODUCTION BASE SUPPORT (C-E)		434						434	
		<b>Other Support Equipment</b>									
		<b>Chemical Defensive Equipment</b>									
2035	116	SMOKE & OBSCURANT FAMILY: SOF (NON AAO ITEM)		3,863						3,863	
		<b>Bridging Equipment</b>									
2035	117	TACTICAL BRIDGING		34,137						34,137	
2035	118	TACTICAL BRIDGE, FLOAT-RIBBON		17,360						17,360	
		<b>Engineer (Non-construction) Equipment</b>									
2035	119	DISPENSER, MINE M139									
2035	120	TOWED VOLCANO DELIVERY SYSTEM									
2035	121	HANDHELD STANDOFF MINEFIELD DETECTION SYS-HS		6,906						6,906	
2035	122	KIT, STANDARD TELEOPERATING		3,023						3,023	

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Request	Change	Authorized		
2035	123	GRND STANDOFF MINE DETECTION SYSTEM (GSTAMID Buffalo landmine vehicles		2,001	Cost	6,300 [6,300]	Qty	Cost
2035	124	ROBOTIC COMBAT SUPPORT SYSTEM (RCSS)		1,038				1,038
2035	125	EXPLOSIVE ORDNANCE DISPOSAL EQPMT (EOD EQPMT		12,670				12,670
2035	126	ITEMS LESS THAN \$5M, COUNTERMINE EQUIPMENT		680				680
2035	127	Combat Service Support Equipment HEATERS AND ECUS		17,554				17,554
2035	128	LAUNDRIES, SHOWERS AND LATRINES		2,020				2,020
2035	129	FLOODLIGHT SET, ELEC, TRL MTD, 3 LIGHTS		7,275				7,275
2035	130	SOLDIER ENHANCEMENT		30		3,900 [3,900]		3,930
2035	131	LIGHTWEIGHT MAINTENANCE ENCLOSURE (LME) Lightweight maintenance enclosure						8,896
2035	132	LAND WARRIOR		8,896				
2035	133	FORCE PROVIDER						
2035	134	AUTHORIZED STOCKAGE LIST MOBILITY SYSTEM (ASL						
2035	135	FIELD FEEDING EQUIPMENT		20,063				20,063
2035	136	AIR DROP PROGRAM		14,288				14,288
2035	137	ITEMS LESS THAN \$5.0M (ENG SPT EQ)		6,546				6,546
2035	138	ITEMS LESS THAN \$5.0M (CSS EQ) High-intensity handheld searchlights				2,500 [2,500]		2,500

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>
		<b>Petroleum Equipment</b>						
2035	139	QUALITY SURVEILLANCE EQUIPMENT						
2035	140	DISTRIBUTION SYSTEMS, PETROLEUM & WATER		38,091				38,091
2035	141	INLAND PETROLEUM DISTRIBUTION SYSTEM						
		<b>Water Equipment</b>						
2035	142	WATER PURIFICATION SYSTEMS		12,581				12,581
		<b>Medical Equipment</b>						
2035	143	COMBAT SUPPORT MEDICAL		11,743		2,500		14,243
		Life support trauma and transport				[2,500]		
		<b>Maintenance Equipment</b>						
2035	144	SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP)		9,427				9,427
2035	145	WELDING SHOP, TRAILER MTD						
2035	146	ITEMS LESS THAN \$5.0M (MAINT EQ)		5,439				5,439
		<b>Construction Equipment</b>						
2035	147	GRADER, ROAD MTZD, HVY, 6X4 (CCE)						
2035	148	SCRAPERS, EARTHMOVING						
2035	149	MISSION MODULES - ENGINEERING		5,863				5,863
2035	150	COMPACTOR						
2035	151	LOADERS		10,202				10,202
2035	152	HYDRAULIC EXCAVATOR						
2035	153	DEPLOYABLE UNIVERSAL COMBAT EARTH MOVERS						
2035	154	TRACTOR, FULL TRACKED						
2035	155	CRANES		3,812				3,812
2035	156	CRUSHING/SCREENING PLANT, 150 TPH						
2035	157	PLANT, ASPHALT MIXING						
2035	158	HIGH MOBILITY ENGINEER EXCAVATOR (HMEE)		8,675				8,675
2035	159	CONST EQUIP ESP		5,310				5,310



# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Authorized</u>	<u>Cost</u>
2035	160	ITEMS LESS THAN \$5.0M (CONST EQUIP)		7,192				7,192
		<b>Rail Float Containerization Equipment</b>						
2035	161	LOGISTIC SUPPORT VESSEL (LSV)						
2035	162	THEATER SUPPORT VESSEL (TSV)				25,000		25,000
2035	163	CAUSEWAY SYSTEMS				[25,000]		
		<b>Modular Causeway System</b>						
2035	164	ITEMS LESS THAN \$5.0M (FLOAT/RAIL)		3,465				3,465
		<b>Generators</b>						
2035	165	GENERATORS AND ASSOCIATED EQUIP		54,397				54,397
		<b>Material Handling Equipment</b>						
2035	166	ROUGH TERRAIN CONTAINER HANDLER (RTCH)						
2035	167	ALL TERRAIN LIFTING ARMY SYSTEM		1,315				1,315
2035	168	MHE EXTENDED SERVICE PROGRAM (ESP)						
2035	169	ITEMS LESS THAN \$5.0M (MHE)						
		<b>Training Equipment</b>						
2035	170	COMBAT TRAINING CENTERS (CTC) SUPPORT		86,421				86,421
2035	171	TRAINING DEVICES, NONSYSTEM		241,946		27,400		269,346
		<b>Call for fire trainer/joint fires and effects trainer</b>				[10,000]		
		<b>MOUT instrumentation</b>				[2,400]		
		<b>Laser marksmanship training system</b>				[15,000]		
2035	172	CLOSE COMBAT TACTICAL TRAINER		61,811				61,811
2035	173	AVIATION COMBINED ARMS TACTICAL TRAINER (AVC)		40,803				40,803
		<b>Test Measure and Dig Equipment (TMD)</b>						
2035	174	CALIBRATION SETS EQUIPMENT						
2035	175	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)		4,054				4,054

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
2035	176	TEST EQUIPMENT MODERNIZATION (TEMOD)						
2035	177	ARMY DIAGNOSTICS IMPROVEMENT PGM (ADIP)		5,214				5,214
		<b>Other Support Equipment</b>						
2035	178	RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT		13,510				13,510
2035	179	PHYSICAL SECURITY SYSTEMS (OPA3)		68,044				68,044
2035	180	BASE LEVEL COM'L EQUIPMENT		7,197				7,197
2035	181	MODIFICATION OF IN-SVC EQUIPMENT (OPA-3)		10,457				10,457
2035	182	PRODUCTION BASE SUPPORT (OTH)		2,655				2,655
2035	183	SPECIAL EQUIPMENT FOR USER TESTING		9,905				9,905
2035	184	MA8975		2,447				2,447
		<b>Spares and Repair Parts</b>						
		<b>OPA2</b>						
2035	185	INITIAL SPARES - C&E		44,102				44,102
		<b>OPA3</b>						
2035	186	INITIAL SPARES - OTHER SUPPORT EQUIP		1,260				1,260
2035	999	CLASSIFIED PROGRAMS		9,354				9,354
		Financial information systems			-22,400			-22,400
		<b>Total - Other Procurement, Army</b>		<b>4,240,896</b>	<b>1,143,400</b>			<b>5,384,296</b>

**Light utility helicopter (sec. 111)**

The committee recommends a provision that would prohibit the expenditure of \$45.0 million from Aircraft Procurement, Army (APA), for light utility aircraft (LUH) until 30 days after the Secretary of the Army certifies that all required documentation for the acquisition of LUH has been completed and approved, and submits a report to the congressional defense committees which (1) updates the Army aviation modernization plan and (2) provides the rationale and analysis for the Army aviation modernization plan.

On February 23, 2004, Army leadership announced their intent to cancel further research, development and planned purchases of the RAH-66 Comanche armed reconnaissance helicopter. This announcement was followed by an amended budget request to reallocate the \$1.2 billion of proposed fiscal year 2005 funding for Comanche development to other aviation programs. The committee supports the Army's termination of the Comanche program and reallocation of Comanche funding to address numerous Army aviation shortfalls. However, the committee has certain concerns with respect to the Army's aviation modernization plan, and in particular, the request to procure LUHs.

The committee is concerned with the Army's plan to introduce another aviation platform, the LUH, into its inventory when this committee has previously directed the Army to streamline its aviation inventory to reduce operations and sustainment costs. The committee notes that in previous versions of the Army's aviation modernization plan, the Army considered and specifically rejected procuring a LUH.

Additionally, the Army has informed the committee that it will not deploy LUHs outside the United States. Given the Army's decision to restructure its aviation force into modular aviation units of action, the committee does not understand how the Army intends to employ LUHs in formations which include UH-60 Black Hawk, AH-64A Apache, and CH-47D Chinook helicopters. The aviation expeditionary regiments of the six Army National Guard divisions which would contain the LUH would not have capabilities similar to those of the aviation brigades of the National Guard heavy divisions and the Active Force.

The committee is also concerned with the lack of documentation and justification for the acquisition of LUH aircraft. The committee notes that the Initial Capabilities Document for LUH aircraft has not been validated by the Joint Requirements Oversight Council (JROC), nor has the Army completed an analysis of alternatives. The Army's descriptive material which accompanied the amended budget request does not adequately justify the request of \$45.0 million for LUH procurement. Further, the Army briefings to the committee have provided little information regarding the program's milestone schedule.

The committee notes that the Army's decision to terminate the Comanche program was made in the context of the Army's decision to restructure its aviation force into modular aviation units of action. While the committee supports the Army's decision, the committee requires more information regarding the Comanche termination and the restructure of Army aviation.

The report required by this provision will update the Army aviation modernization plan. The Army aviation modernization plan will, as a minimum, address the recommendations of the Army aviation task force, including: (a) the acceleration of the procurement and development of aircraft survivability equipment, to include a detailed listing of aircraft survivability equipment by platform and the programmatic funding associated with procuring this equipment; (b) the conversion of Apache helicopters to block III configuration to include the rationale for converting only 501 Apache helicopters to that configuration and the costs associated with funding the conversion of all Apache helicopters to the block III configuration; (c) the rationale for the procurement of light armed reconnaissance helicopters, including the analysis of alternatives and the costs associated with upgrading the helicopter to meet Army requirements; (d) the rationale for the procurement of the light utility helicopter, together with a copy of the analysis of alternatives. As part of the analysis of alternatives, the committee directs the Army to specifically consider an alternative that would substitute for the LUH some combination of new light armed reconnaissance helicopters and UH-60 utility helicopters in National Guard aviation expeditionary regiments that could both meet the State, counter narcotics and homeland security missions, while also making those units similar to other modular Army aviation units. It is not the intent of the committee to limit the analysis of alternatives to this option. The Army should consider all materiel solutions in the analysis of alternatives; (e) the rationale for the procurement of cargo fixed wing aircraft; (f) the rationale for the initiation of a Joint Multi-Role helicopter; and (g) a description of the operational employment of the restructured aviation force. The report must be submitted by March 1, 2005.

#### **Wheeled vehicle ballistic armor protection (sec. 112)**

The committee recommends a provision that would add \$610.0 million in Other Procurement, Army (OPA), for the procurement of up-armored high mobility multipurpose wheeled vehicles (HMMWV) in sufficient quantities to acquire such vehicles up to a rate of 450 vehicles per month and for the procurement of add-on ballistic armor protection for medium and heavy wheeled vehicles. The \$610.0 million would be in addition to the \$315.0 million increase in OPA for up-armored HMMWVs (UAH) the committee recommended elsewhere in this report. The provision will provide the Secretary of the Army with the flexibility to procure either or both UAHs and wheeled vehicle add-on armor. The Secretary will inform the congressional defense committees of any intended allocation not later than 15 days before an allocation is made under this provision.

During Operation Iraqi Freedom (OIF), the United States Central Command (CENTCOM) determined that the UAH and add-on armor for medium and light wheeled vehicles would provide a degree of protection for soldiers and Marines against enemy small arms and improvised explosive devices (IEDs). As a result, CENTCOM increased its requirement of UAHs and wheeled vehicle add-on ballistic armor for wheeled vehicles in theater. The committee supports this requirement, and recommends an increase of

\$315.0 million elsewhere in this report to maintain UAH production at 300 per month from April 2005 to September 2005. The committee understands that the manufacturers of the UAH, with additional funding, have the ability to produce 450 UAH per month beginning in November 2004.

The budget request included no funding for wheeled vehicle add-on ballistic armor protection. On April 22, 2004, the Army briefed the committee on an emerging \$355.0 million requirement for add-on armor plating for various add-on armor kits for M915-series trucks, heavy expanded mobility tactical trucks, heavy equipment transporters, palletized load systems, and family of medium tactical vehicles.

## **Other Army Programs**

### **Army Aircraft**

#### **Apache AH-64 combo-PAK acceleration**

The budget request included \$656.7 million in Aircraft Procurement, Army (APA), for the Apache Longbow modifications, but no funding for the AH-64D combo-PAK, a combination ammunition storage magazine and crashworthy, auxiliary fuel tank for the Apache AH-64 A/D. The committee understands that the combo-PAK increases the fuel capacity of the Apache nearly by 30 percent, while preserving the Apache's lethality. The committee believes that the combo-PAK is a cost-effective enhancement to the Apache AH-64A/D. The committee recommends an increase of \$5.0 million in APA, for the Apache AH-64 combo-PAK, for a total authorization of \$661.7 million.

#### **UH-60 Black Hawk modifications**

The amended budget request included \$156.4 million in Aircraft Procurement, Army (APA), for the procurement of UH-60 Black Hawk modifications, including \$14.2 million for the procurement and installation of the crashworthy external fuel systems (CEFS), but no funding for upgrading the rotor de-icing systems for the UH-60 Black Hawk helicopter.

CEFS is a safety modification that reduces the risk of a postcrash fire. The committee understands that the only fielded alternative auxiliary fuel system for the UH-60 Black Hawk helicopter is a non-crashworthy, non-ballistically tolerant system. The committee notes that the Army identified rotor deicing as a requirement for safe, all-weather flight in the Black Hawk Operational Requirements Document in March 2001, but has not funded this safety item.

The committee recommends an increase of \$5.0 million in APA, to procure crashworthy external fuel systems for the UH-60 Black Hawk, and an increase of \$5.0 in APA, to continue work on the UH-60 Black Hawk de-icing upgrade, for a total authorization of \$166.4 million.

#### **Kiowa Warrior**

The budget request included \$39.3 million in Aircraft Procurement, Army (APA), for safety enhancements for the OH-58D Kiowa

Warrior helicopter. The Kiowa Warrior safety enhancement program (SEP) intends to reduce aircraft weight, resulting in increased range, maneuverability, and mission performance of the helicopter, which provides the Army with an armed reconnaissance capability. The GAU-19/A is an externally mounted aircraft gun that was successfully field tested and approved for the SEP by the Army. The GAU-19/A is safer, lighter, more reliable, and requires less maintenance than the current OH-58D weapon, the M2 .50 caliber machine gun. The committee recommends an increase of \$6.0 million in APA, for 50 GAU-19As, for a total authorization of \$45.3 million for Kiowa Warrior.

#### **Aircraft survivability equipment**

The amended budget request included \$7.3 million in Aircraft Procurement, Army (APA), for aircraft survivability equipment, including \$4.9 million for the AN/AVR-2B laser detecting set. The AN/AVR-2B is a passive threat warning system which receives, processes, and displays threat information resulting from the aircraft illumination by lasers. The committee notes that the funding contained in the budget request would procure AN/AVR-2Bs for installation on AH-64 A/D Apache helicopters, but does not fully address the Army acquisition objective for 2,597 kits. The committee recommends an increase of \$10.0 million in APA, for the AN/AVR-2B laser detecting set, for a total authorization of \$17.3 million.

#### **Army airborne command and control system**

The amended budget request included \$26.6 million in Aircraft Procurement, Army (APA), for five Army airborne command and control systems (A2C2S). The A2C2S was successfully used by the 101st Airborne and 4th Infantry Divisions during Operation Iraqi Freedom. The committee understands that the Army has the opportunity to upgrade the A2C2S while the systems are still in production. The committee recommends an increase of \$10.9 million in APA, to retrofit eight systems in production and procure one additional A2C2S system, for a total authorization of \$37.5 million.

#### **Aircrew integrated systems**

The budget request included \$28.6 million for aircrew integrated systems, but no funding for the Cockpit Airbag System (CABS), a crash-activated, inflatable protection system. The committee believes that CABS provide supplemental head and body restraint as well as additional protection for aircrews, which can significantly reduce fatalities and injuries in the event of helicopter crashes. The committee recommends an increase of \$2.5 million in Aircraft Procurement, Army, for CABS, for a total authorization of \$31.1 million.

### **Missile Procurement, Army**

#### **Patriot advanced capability-3/medium extended air defense system combined aggregate program**

The budget request included \$489.3 million in Missile Procurement, Army (MPA), for procurement of Patriot Advanced Capability-3 (PAC-3), \$64.2 million in PE 64865A for PAC-3 research

and development, \$264.5 million in PE 63869A for research and development for the Medium Extended Air Defense System (MEADS) program, and \$31.7 million in PE 23801A for the Missile/Air Defense Improvement Program.

The committee notes that, during fiscal year 2004, the Department of Defense approved a merger of the PAC-3 and MEADS program efforts, and that Congress approved both the program merger and the Department's request to move management responsibility for the combined program from the Missile Defense Agency to the Army.

The committee is disappointed that the Army appears to have made little progress in merging the two efforts. The committee's understanding of the merged program is that the MEADS research and development effort would provide technology for insertion into the PAC-3 system as it matured. Yet, the committee notes that the budget justification materials continue to reflect two distinct program elements, and that testimony by the commander of the Army Space and Missile Defense Command to the committee continues to support the view that MEADS is a distinct system that will follow PAC-3.

The committee is concerned about the level of commitment demonstrated by the Army to date to the PAC-3/MEADS Combined Aggregate Program (CAP). The committee notes that the funding request for PAC-3 missiles represents a 20 percent decrease compared to the fiscal year 2004 authorization, and that the number of PAC-3 missiles requested for fiscal year 2005 is 108, down from 135 in fiscal year 2004. The requested procurement rate is far less than the rate of 12 per month for which the program has been facilitated. The committee also notes that MEADS research and development funding was the source of funds for a reprogramming recently proposed by the Department of Defense.

The committee understands that procurement of fewer PAC-3 missiles results in higher unit costs, and is concerned that Army leadership has not focused on initiatives to reduce the unit cost of the missile. The committee believes that a combination of higher acquisition rates, appropriate cost-reduction contract incentives, and technical cost-reduction initiatives could allow the Army to procure more missiles at significantly lower unit costs. The committee notes, for example, that a composite radome under development for PAC-3 could reduce missile costs significantly, but no funding has been requested for that effort.

The committee directs the Secretary of the Army to forward to the congressional defense committees no later than November 15, 2004, its plan to merge the PAC-3 and MEADS programs. The committee further directs the Secretary of the Army to develop and implement a plan to reduce the unit cost of the PAC-3 missile, and provide the congressional defense committees a report on that plan no later than February 15, 2005. The committee recommends an increase of \$90.0 million in MPA for procurement of a total of 138 PAC-3 missiles, an increase of 30 missiles. The committee also recommends an increase of \$5.0 million in PE 23801A for continued research and development on the advanced composite radome for PAC-3. The committee recommends the budget request for re-

search and development for MEADS and PAC-3, and that the funding for these two efforts be merged into PE 63869A.

### **Weapons and Tracked Vehicles**

#### **M113 family of vehicles**

The budget request included no funding in the Procurement of Weapons and Tracked Combat Vehicles, Army (WTCV-A), for the conversion of the M113 Family of Vehicles (FOV) from the M113A2 variant to M113A3 variant. The Army deployed the A2 variant of the M113 FOVs from Army Prepositioned Stocks (APS) during Operation Iraqi Freedom. The committee believes the Army should upgrade the M113A2 FOVs in Army Prepositioned Stocks with M113A3 to provide soldiers with vehicles that have improved mobility, survivability, and armor protection. The committee recommends an increase of \$15.0 million in WTCV-A, for M113 FOV conversions, for a total authorization of \$15.0 million.

#### **XM-8 assault weapon**

The budget request included \$500,000 in Procurement of Weapons and Tracked Combat Vehicles, Army (WTCV-A), for 100 XM-8 assault weapons for production qualification testing. The XM-8 will provide a more capable weapon to soldiers. The committee notes that the Chief of Staff, Army, has identified a fiscal year 2005 unfunded requirement to acquire XM-8 weapons for two brigade combat teams. While the committee supports this requirement, the committee does not believe that a full rate production decision will be made in time for the Army to procure 7,000 weapons in fiscal year 2005. The committee recommends an increase of \$13.0 million in WTCV-A, for 3,500 XM-8 assault weapons, for a total authorization of \$13.5 million.

#### **Squad automatic weapons**

The budget request included \$100,000 in Procurement of Weapons and Tracked Combat Vehicles, Army (WTCV-A), to procure M249 Squad Automatic Weapon (SAW) spare barrel bags but no funding for individual M249 SAWs, a lightweight, 5.56mm machine gun for employment by active and reserve soldiers, including those soldiers deployed in support of Operation Enduring Freedom and Operation Iraqi Freedom. The committee understands that as a result of the Army restructuring into modular brigade units of action, the Army's requirement for the SAW has increased. The committee notes that the Chief of Staff, Army, identified fiscal year 2005 unfunded requirements to procure additional SAWs based on new requirements for the modular brigade units of action. The committee recommends an increase of \$8.4 million for the procurement of 2,000 SAWs, for a total authorization of \$8.5 million.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.



### **Rapid Fielding Initiative**

The budget request included \$6.9 million in Procurement of Weapons and Tracked Combat Vehicles Army (WTCV-A), and \$8.9 million in Other Procurement, Army (OPA), to procure individual weapon items and radios as part of the Rapid Fielding Initiative (RFI), an Army program to respond quickly to individual soldier equipment requirements and to provide soldiers engaged in or preparing for Operation Iraqi Freedom and other operations, with state-of-the-art individual weapons, clothing, and equipment, including radios. The RFI has greatly streamlined acquisition processes that previously took months and years to supply new or improved equipment to soldiers. During visits to the U.S. Central Command area of operations, the committee noted the enthusiastic support by Army commanders and individual soldiers for items acquired through RFI. The committee notes that the Chief of Staff, Army, identified fiscal year 2005 unfunded requirements for urgent RFI equipment shortfalls in support of Operations Enduring Freedom and Iraqi Freedom.

The committee is committed to ensuring that the individual soldier, active and reserve, is personally equipped for advantage in combat and contingency operations. Therefore, the committee recommends a number of funding increases to ensure soldier lethality, mobility, and survivability.

The committee recommends an increase of \$17.5 million in WTCV for the RFI, including an increase of \$9.7 million in WTCV-A to procure and field magazines, sights, and weapons packs for the M240B 7.62 mm medium machine gun for eight Brigade Combat Teams and an increase of \$7.8 million in WTCV-A to procure and field Squad Automatic Weapon upgrades and improvements for eight Brigade Combat Teams. The committee recommends an increase of \$14.0 million in OPA for the RFI, for the procurement of multi-band inter/intra team radios for eight Brigade Combat Teams. The committee recommends a total increase of \$31.5 million for the RFI.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

### **Army Ammunition**

#### **Ammunition peculiar equipment**

The budget request included \$4.9 million in Procurement of Ammunition, Army (PAA), for ammunition peculiar equipment (APE). The committee notes that APE includes unique, low-density equipment items for specific use in ammunition depot operations, many of which cannot be performed if the required APE is not supplied in a timely manner. Therefore, the committee recommends an increase of \$4.0 million in PAA for APE as follows: \$3.0 million for a robotic dominated, advanced controlled, flexible ammunition module; and \$1.0 million for APE optimized for desert operations.

**Provision of industrial facilities**

The budget request included \$40.7 million in Procurement of Ammunition, Army (PAA), for the provision of industrial facilities, including the establishment, augmentation, and improvement of ammunition production capabilities. The committee notes that changes to the Army's small arms training strategy and introduction of new variations of ammunition have increased requirements on industrial facilities. Therefore, the committee recommends an increase of \$30.0 million in PAA for the provision of industrial facilities as follows: \$16.0 million for the replacement of acid plant equipment critical to all Army and Marine Corps small, medium, and large caliber ammunition; \$10.0 million to sustain Modern Munitions Enterprise Flexible Load, Assemble, and Pack by adding digital x-ray to flex line capability, developing computerized production quality processes, and installing precision-munitions assembly and clean room support areas; \$2.0 million to facilitate the introduction of the 120mm Family of Extended Ammunition; and \$2.0 million for replacement and upgrading of equipment necessary for the safe and effective reactivation of the RDX nitration facility.

**Conventional ammunition demilitarization**

The budget request included \$95.4 million in Procurement of Ammunition, Army (PAA), for conventional ammunition demilitarization. The committee notes that this includes funds for the demilitarization and resource recovery and reutilization of conventional ammunition and the demilitarization of missiles and missile components that are unserviceable, obsolete, or excess to requirements. The committee also notes that the budget request for fiscal year 2005 is an increase of more than six percent over the budget for fiscal year 2004. While it is projected that this funding increase will increase the demilitarization of conventional ammunition and missiles, additions to the demilitarization stockpile of conventional ammunition and missiles is forecasted to increase at a rate greater than the number of demilitarizations planned. The committee, therefore, recommends an increase of \$7.4 million in PAA for conventional ammunition demilitarization as follows: \$4.4 million for demilitarization activities; and \$3.0 million for the missile recycling energetics processing module.

**Other Procurement Army****M871A3 Semi-trailer**

The budget request included \$9.2 million in Other Procurement, Army (OPA), for flatbed trailers, including \$5.9 million for the procurement of 87 M871A3 semi-trailers, a tactical, dual-purpose, bulk and container transporter. The committee understands that the Army is short 55 M871A3 semi-trailers against an Army acquisition objective of 9,026 semi-trailers based on emerging requirements in support of Operations Enduring Freedom and Iraqi Freedom and the Army's ongoing reorganization into modular units of action. The committee notes that the Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement to acquire additional 87 M871A3 semi-trailers. The committee recommends an increase

of \$2.5 million in OPA, for the procurement of 55 additional M871A3 semi-trailers, for a total authorization of \$11.7 million.

### **High mobility multi-purpose wheeled vehicles**

The budget request included \$303.7 million in Other Procurement, Army (OPA), for high mobility multi-purpose wheeled vehicles (HMMWV). Of that amount, the Army requested \$124.9 million for 818 HMMWVs of the up-armored variant. During Operation Iraqi Freedom (OIF), the U.S. Central Command (CENTCOM) determined that the up-armored HMMWV (UAH) would provide better protection for soldiers and Marines against enemy small arms and improvised explosive devices (IEDs) than the basic HMMWV. As a result, CENTCOM increased its requirement of up-armored HMMWVs in theater.

The committee notes that the Army has taken aggressive action to satisfy CENTCOM's evolving force protection requirements for UAHs by redistributing existing UAHs for other major command's assets not committed to OIF or Operation Enduring Freedom; diverting newly produced UAH to Iraq; and increasing the production of wheeled vehicle add-on armor kits and UAHs.

As a result of the Army's efforts, as of April 22, 2004, 2,832 UAHs have been delivered to the CENTCOM area of operations, including 1,338 diverted from other sources. The Army intends to satisfy the remaining CENTCOM requirement by procuring new UAHs. The committee understands that the Army has received over \$700.0 million from various sources to increase UAH production to 300 per month from August 2004 to March 2005. With this increased production, the Army will have produced the CENTCOM requirement of 4,454 vehicles by August 2004 and delivered the CENTCOM requirement of 4,454 vehicles by October 2004.

The committee understands that the Army has placed a priority on backfilling those units that provided UAHs to meet CENTCOM's urgent requirement. The committee notes that the Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement to maintain UAH production at 300 per month from April 2005 to March 2006. The committee recommends an increase of \$315.0 million in OPA to maintain UAH production at 300 per month through September 30, 2005.

### **M915 family of vehicles**

The budget request included \$15.3 million in Other Procurement, Army (OPA), for the procurement of M915A3 line haul trucks and M916A3 light equipment tractors. The committee understands that the Army is short 187 M915A3 trucks against an Army acquisition objective of 6,026 M915A3 trucks and 378 M916A3 light equipment tractors against a requirement of 2,358 M916A3 tractors based on emerging requirements in support of Operation Enduring Freedom and Operation Iraqi Freedom and the Army's ongoing reorganization into modular units of action. The committee notes that the Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement to acquire additional trucks in the M915 family of vehicles. The committee recommends an increase of \$15.0 million in OPA, for additional trucks in the M915 family of vehicles, for a total authorization of \$30.3 million.

### **Family of heavy tactical vehicles**

The budget request included \$84.0 million in Other Procurement, Army (OPA), for the procurement of the family of heavy tactical vehicles (FHTV). The budget request includes \$45.6 million for the procurement of Heavy Expanded Mobility Tactical Trucks, \$4.6 million for Forward Repair Stations, \$12.6 million for Palletized Load Systems trucks and trailers, and \$19.1 million for Movement Tracking System (MTS) devices.

The committee understands that FHTV provides transports critical bulk petroleum, ammunition, and other materials for Army units, and was a critical combat service support enabler during Operations Enduring Freedom and Iraqi Freedom. The Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement for additional FHTV.

The MTS provides commanders with the capability to communicate with and track the location of vehicles. The committee understands that the MTS provided valuable communications and vehicle location information during Operation Iraqi Freedom. The committee notes that the Army has procured or contracted for over 8,500 MTS devices, leaving it well short of its procurement objective of 37,000 systems. The committee believes that MTS procurement should be accelerated to provide the Army with this combat-proven capability to save soldiers lives and enhance unit effectiveness.

The committee recommends an increase of \$15.0 million for the procurement of additional trucks and trailers in the family of heavy tactical vehicles, and an increase of \$35.0 million for the procurement of 2,235 additional Movement Tracking Systems, for a total authorization of \$134.0 million.

### **Defense advanced global positioning system receiver**

The budget request included \$40.1 million in Other Procurement, Army (OPA), for Global Positioning System (GPS) user equipment acquisition, of which \$30.2 million is for procurement of the Defense Advanced GPS Receiver (DAGR).

DAGR is a new GPS receiver that incorporates improved security and jam resistance, and will enhance operational effectiveness. The committee recognizes the importance of navigation and geolocation to warfighters. The committee also notes the legal requirement, established originally in the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103–106), that new and modified vehicles must be equipped with GPS receivers. The committee further notes that the quantity of DAGRs requested for fiscal year 2005 has declined compared to fiscal year 2004. Given the significance of the capability and the urgency of warfighter needs, the committee believes that additional funding is required.

The committee recommends an increase of \$5.0 million in OPA for acquisition of an additional 2,500 DAGRs.

### **Enhanced position location reporting system**

The budget request included \$34.4 million in Other Procurement, Army (OPA), including \$10.0 million for enhanced position location reporting system (EPLRS) retrofit kits. However, the budget request included no funding for EPLRS radios or EPLRS net control

stations (NCS). The EPLRS provides the backbone for the Army's digitized network until joint tactical radio system radios and waveforms become available. The EPLRS NCS manages and tracks EPLRS radios within an EPLRS network. The committee notes that the Army acquisition objective for EPLRS radios is 33,396 radios, yet the Army currently has only approximately 10,000 radios. The committee also notes that the Chief of Staff, Army, has identified a fiscal year 2005 unfunded requirement for EPLRS NCS for the restructured 3rd Infantry Division. The committee recommends an increase of \$7.0 million in OPA, for EPLRS radios and network managers, for a total authorization of \$41.4 million.

#### **Single channel ground and airborne radio system**

The budget request included \$48.6 million in Other Procurement, Army (OPA), for the procurement of the single channel ground and airborne radio system (SINCGARS) family of radios. The committee understands that the Army identified a shortfall of 285 SINCGARS radios to support the reorganization of 3rd Infantry Division into modular units of action. The committee notes that the Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement to acquire additional SINCGARS radios and installation kits for the restructured 3rd Infantry Division. The committee recommends an increase of \$12.5 million in OPA, for the procurement of SINCGARS radios, for a total authorization of \$61.1 million.

#### **Prophet ground signals intelligence system, block I**

The budget request included \$17.7 million in Other Procurement, Army (OPA), for the continued procurement of the Prophet ground signals intelligence system. After submission of the fiscal year 2005 budget request, the Army finalized decisions to increase the number of combat brigades, creating additional requirements for the Prophet system.

The Prophet ground signals intelligence system supports ground forces with timely information about enemy force locations and intentions during tactical operations. The Prophet system has proven very valuable during recent military operations. Each Army combat brigade is authorized one Prophet system to provide dedicated intelligence support. The recent decision by the Army to increase the number of combat brigades has increased the requirement for the objective inventory of Prophet systems. Additionally, the evolution of communications technology, as well as the use of tactical systems in stability operations and peacekeeping operations, has highlighted the need to improve the capabilities of the Prophet system with regard to modern, commercial communications systems.

The committee recommends an increase of \$8.4 million in OPA, for Prophet Ground (TIARA), to procure additional Prophet systems and upgrade system capabilities.

#### **Shadow tactical unmanned aerial vehicle**

The amended budget request included \$100.5 million in Other Procurement, Army (OPA), for the procurement of eight Shadow tactical unmanned aerial vehicle (TUAV) systems. The committee understands that the Army requires additional TUAVs based on emerging requirements in support of Operation Enduring Freedom

and Iraqi Freedom and the Army's ongoing reorganization into modular units of action. The Army has initiated actions to incorporate the Shadow TUAV into an ongoing Aviation and Missile Command program to analyze Shadow TUAV life cycle maintenance costs in order to reduce operations and sustainment costs, enhance safety, and increase operational readiness. The committee notes that the Chief of Staff, Army, identified a fiscal year 2005 unfunded requirement to acquire additional TUAVs. The committee recommends an increase of \$25.6 million in OPA for additional TUAVs and \$5.0 million in OPA for the procurement of Shadow TUAV components, for an authorization of \$131.1 million.

#### **Night vision devices**

The budget request included \$102.3 million in Other Procurement, Army (OPA), for night vision devices, including \$67.3 million for the procurement of over 21,000 AN/PVS-7 and AN/PVS-14 night vision devices. These devices increase situational awareness, mobility, and lethality during low light and nighttime operations. The committee understands that as a result of the Army's restructuring into modular brigade units of action, the Army's evolving requirement for the night vision devices has increased. The committee notes that the Chief of Staff, Army, identified fiscal year 2005 unfunded requirements to procure additional AN/PVS-14s based on new requirements for the modular brigade units of action. The committee recommends an increase of \$14.0 million for the procurement of an additional 4,600 AN/PVS-14s, for a total authorization of \$116.3 million.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

#### **Meteorological measuring set-profiler**

The budget request included \$5.0 million in Other Procurement, Army (OPA), for the AN/TMQ-52 meteorological measuring set-profiler (MMS-P), which replaces the current AN/TMQ-41 meteorological measuring set (MMS). The committee understands that MMS-P will increase the lethality of towed and self-propelled artillery systems and the Multiple Launch Rocket System by providing accurate weather data. The committee understands additional MMS-Ps are required in support of Operation Iraqi Freedom. The committee recommends an increase of \$3.4 million in OPA, for MMS-P, for a total authorization of \$8.4 million.

#### **AN/TPQ-36(V)8 radar processor replacement**

The budget request included \$17.4 million for Other Procurement, Army (OPA), including \$4.7 million to complete the upgrade of certain electronic components in the AN/TPQ-36(V)8 Firefinder weapons locating radar. However, the Army requested no funding to upgrade the current radar processor, which provides for the digital signal processing of antenna data. The committee believes that the Army should upgrade the current processor to improve the performance of the weapon location function, replace obsolete components, and reduce life cycle costs. The committee recommends an

increase \$4.0 million in OPA, to replace the AN/TPQ-36(V)8 Firefinder radar processor, for a total authorization of \$21.4 million.

#### **Mine protected clearance vehicles**

The budget request included \$2.0 in Other Procurement, Army (OPA), for ground standoff mine detection systems, but included no funding for a mine protected clearance vehicle (MPCV), a blast and ballistically protected truck used to neutralize explosive devices. The committee understands that the Army has seven MPCVs deployed in support of Operation Iraqi Freedom and three MPCVs deployed in support of Operation Enduring Freedom, protecting soldiers and Marines from improvised explosive devices. The committee recommends an increase of \$6.3 million in OPA for eight MPCVs, for a total authorization of \$8.3 million.

#### **Lightweight maintenance enclosure**

The budget request included no funding in Other Procurement, Army (OPA), for lightweight maintenance enclosures (LME) to replace antiquated maintenance tents. The committee notes that the Army has an authorized acquisition objective of 5,018 LMEs and has plans to procure 1,254 LMEs during fiscal years 2003 and 2004. The committee recommends an increase of \$3.9 million in OPA for approximately 300 additional LMEs, for a total authorization of \$3.9 million.

#### **High intensity handheld searchlights**

The budget request included no funding in Other Procurement, Army (OPA), for high intensity handheld searchlights. The committee understands that the Army uses handheld lighting to allow safer nighttime operations. The committee recommends an increase of \$2.5 million in OPA to acquire high intensity handheld searchlights, for a total authorization of \$2.5 million.

#### **Life support for trauma and transport**

The budget request included \$11.7 million in Other Procurement, Army (OPA), for field medical equipment, but no funding for the life support for trauma and transport (LSTAT), a portable intensive care unit. The committee notes that the LSTAT provides resuscitative and life-sustaining systems to the field. The committee recommends an increase of \$2.5 million in OPA, for additional LSTATs, for a total authorization of \$14.2 million.

#### **Modular Causeway System**

The budget request included no funding in Other Procurement, Army (OPA), for the modular causeway system (MCS). The MCS is an assemblage of interoperable and interchangeable components, which constitute the Army's primary means of augmenting existing port facilities, or conducting joint logistics over-the-shore (JLOTS) operations where no port is available. The committee notes that the Army budgeted for MCS in fiscal years 2003 and 2004, and has programed funds in the Future Years Defense Program. The committee recommends an increase of \$25.0 million in OPA, to accel-

erate the procurement of MCS, for a total authorization of \$25.0 million.

### **Nonsystem training devices**

The budget request included \$241.9 million in Other Procurement, Army (OPA), for nonsystem training devices. However, the budget request did not include funds for the call for fires trainer (CFFT), the laser marksmanship training system (LMTS), and the Military Operations on Urbanized Terrain (MOUT) instrumentation system.

The CFFT is a collective training system that provides a simulated battlefield for training forward observers in an open and urban terrain module. The ongoing synchronization of CFFT with the joint fire and effects trainer system (JFETS) enables virtual close air support rehearsals and enhances joint interoperability training. The committee understands that the Army has a requirement for 408 CFFTs.

The LMST is a comprehensive laser-based training platform for the individual soldier. The committee recognizes the need for Active and Reserve component soldiers to maximize training opportunities prior to deployment. The LMTS offers the advantage of allowing the soldier to fire their personal weapon without live ammunition. The requirement for the LMTS is 4,585 company sets.

The MOUT instrumentation system provides for automated data collection and feedback and an interactive target system for combined arms training. The committee understands that this system is used to train soldiers in urban warfare.

The committee recommends an increase of \$10.0 million in OPA, for the procurement of CFFT, \$15.0 million for procurement of LMTS for Active and Reserve component soldiers, and \$2.4 million for the MOUT instrumentation system, for a total authorization of \$269.3 million.

### **Subtitle C—Navy Programs**



# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Request	Cost	Change	Qty	Cost	Authorized	Qty	Cost
		Aircraft Procurement, Navy									
		Combat Aircraft									
1506	1	AV-38 (V/STOL)HARRIER (MYP)			4,659						4,659
1506	2	ADVANCE PROCUREMENT (CY)			8,243						8,243
1506	3	F/A-18E/F (FIGHTER) HORNET (MYP)	42		2,991,592				42		2,991,592
1506	3	LESS: ADVANCE PROCUREMENT (PY)			-84,136						-84,136
1506	4	ADVANCE PROCUREMENT (CY)			78,306						78,306
1506	5	V-22 (MEDIUM LIFT)	8		885,339				8		885,339
1506	5	LESS: ADVANCE PROCUREMENT (PY)			-38,768						-38,768
1506	6	ADVANCE PROCUREMENT (CY)			71,490						71,490
1506	7	UH-1Y/AH-1Z	9		241,792				9		241,792
1506	8	MH-60S (MYP)	15		390,427				15		390,427
1506	8	LESS: ADVANCE PROCUREMENT (PY)			-94,832						-94,832
1506	9	ADVANCE PROCUREMENT (CY)			105,159						105,159
1506	10	MH-60R	8		384,618				8		384,618
1506	10	LESS: ADVANCE PROCUREMENT (PY)			-46,127						-118,827
		Reductions									
		Reductions									
1506	11	ADVANCE PROCUREMENT (CY)			70,604						61,204
		Reductions									
1506	12	E-2C (EARLY WARNING) HAWKEYE (MYP)	2		226,132				2		226,132
1506	12	LESS: ADVANCE PROCUREMENT (PY)			-14,595						-14,595
1506	13	ADVANCE PROCUREMENT (CY)			36,413						36,413
		Airlift Aircraft									
1506	14	UC-35	1		65,224				1		65,224
1506	15	C-40A									

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>			<u>Senate</u>			<u>Senate</u>		
			<u>Qty</u>	<u>Request</u>	<u>Cost</u>	<u>Qty</u>	<u>Change</u>	<u>Cost</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
1506	16	C-37 Additional aircraft	1		53,331		1	53,300	2		106,631
		<b>Trainer Aircraft</b>									
1506	17	T-48 (T-39 REPLACEMENT)	1		52,435	-1		-52,435			
1506	18	Program postponed									
		T-45TS (TRAINER) GOSHAWK	8		253,589	[-1]		[-52,435]			
1506	19	Additional T-45 aircraft						52,400	8		305,989
		JPATS						[52,400]			
		<b>Other Aircraft</b>									
1506	20	KC-130J	4		320,389	4		24,000	4		26,534
1506	20	LESS: ADVANCE PROCUREMENT (PY)			-41,703						
1506	21	ADVANCE PROCUREMENT (CY)			45,531						
1506	22	F-5	9		4,487				9		4,487
		<b>Modification of Aircraft</b>									
1506	23	EA-6 SERIES			165,702			20,000			185,702
		EA-6B reliability/sustainment						[20,000]			
1506	24	AV-8 SERIES			20,808						20,808
1506	25	F-14 SERIES									
1506	26	ADVERSARY			5,465						5,465
1506	27	F-18 SERIES			412,495						432,495
		ATFLIR						20,000			
		Ancillary armament equipment						[8,000]			
		ECP-560						[4,000]			
1506	28	H-46 SERIES			71,179			[8,000]			79,179
		CH-46 lightweight seats						8,000			
								[8,000]			

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Qty	Cost	Change	Authorized
1506	29	AH-1W SERIES						
		Night Targeting System upgrade		2,153		5,000		7,153
1506	30	H-53 SERIES		9,835		[5,000]		9,835
1506	31	SH-60 SERIES		11,655		5,000		16,655
		H-60 armed helo kits				[5,000]		
1506	32	H-1 SERIES		3,488				3,488
1506	33	EP-3 SERIES		28,339		5,000		33,339
		EP-3 JMOD common configuration				[5,000]		
1506	34	P-3 SERIES		134,970		36,800		171,770
		P-3 AIP kits				[26,800]		
		Operational flight trainer for the P-3				[10,000]		
1506	35	S-3 SERIES		1,861				1,861
1506	36	E-2 SERIES		15,124		8,000		23,124
		Production navigation equipment				[8,000]		
1506	37	TRAINER A/C SERIES		14,040				14,040
1506	38	C-2A		29,564				29,564
1506	39	C-130 SERIES		15,419				15,419
1506	40	FEWSG		579				579
1506	41	CARGO/TRANSPORT A/C SERIES		8,285				8,285
1506	42	E-6 SERIES		19,721				19,721
1506	43	EXECUTIVE HELICOPTERS SERIES		21,800				21,800
1506	44	SPECIAL PROJECT AIRCRAFT		12,415				12,415
1506	45	T-45 SERIES		44,190				44,190
1506	46	POWER PLANT CHANGES		24,409				24,409
1506	47	JPATS SERIES		648				648
1506	48	AVIATION LIFE SUPPORT MODS		7,364				7,364
1506	49	COMMON ECM EQUIPMENT		43,163				43,163

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Cost</u>	<u>Authorized</u>	<u>Cost</u>
1506	50	COMMON AVIONICS CHANGES		167,504				167,504
1506	51	ID SYSTEMS		1,575				1,575
1506	52	V-22 (TILT/ROTOR ACFT) OSPREY		3,448				3,448
		<b>Aircraft Spares and Repair Parts</b>						
1506	53	SPARES AND REPAIR PARTS		925,813				925,813
		<b>Aircraft Support Equipment and Facilities</b>						
1506	54	COMMON GROUND EQUIPMENT		474,521				474,521
1506	55	AIRCRAFT INDUSTRIAL FACILITIES		16,115				16,115
1506	56	WAR CONSUMABLES		9,070				9,070
1506	57	OTHER PRODUCTION CHARGES		9,883				9,883
1506	58	SPECIAL SUPPORT EQUIPMENT		61,553				61,553
1506	59	FIRST DESTINATION TRANSPORTATION		1,581				1,581
1506	60	JUDGMENT FUND						
1506	61	CANCELLED ACCOUNT ADJUSTMENTS						
<b>Total - Aircraft Procurement, Navy</b>				<b>8,767,867</b>		<b>102,965</b>		<b>8,870,832</b>
<b>Weapons Procurement, Navy</b>								
		<b>Ballistic Missiles</b>						
1507	1	TRIDENT II						
1507	1	LESS: ADVANCE PROCUREMENT (PY)	5	113,761			5	113,761
		<b>Modification of Missiles</b>						
1507	2	TRIDENT II MODS		-40,694				-40,694
		<b>Support Equipment and Facilities</b>						
1507	3	MISSILE INDUSTRIAL FACILITIES		695,555				695,555
				1,334				1,334

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Other Missiles</b>						
		<b>Strategic Missiles</b>						
1507	4	TOMAHAWK	293	256,196	23		316	276,196
		Tactical Tomahawk missiles			[23]			[20,000]
1507	5	ESSM	71	80,313	10		81	91,613
		Additional missiles			[10]			[11,300]
		<b>Tactical Missiles</b>						
1507	6	AMRAAM	46	33,914			46	33,914
1507	7	SIDEWINDER	157	35,177			157	35,177
1507	8	JSOW	389	139,407	15		404	144,407
		JSOW-C			[15]			[5,000]
1507	9	SLAM-ER						
1507	10	STANDARD MISSILE	75	150,098			75	150,098
1507	11	RAM	90	47,412			90	47,412
1507	12	AERIAL TARGETS		72,686				72,686
1507	13	DRONES AND DECOYS						
1507	14	OTHER MISSILE SUPPORT						
		AGM-114 Hellfire		10,385	190		190	26,385
					[190]			[16,000]
		<b>Modification of Missiles</b>						
1507	15	SIDEWINDER MODS						
1507	16	HARM MODS						
1507	17	STANDARD MISSILES MODS		51,790				51,790
		<b>Support Equipment and Facilities</b>						
1507	18	WEAPONS INDUSTRIAL FACILITIES		4,037				24,037
		Allegany Ballistics Laboratory facility restoration						[20,000]

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
1507	19	ORDNANCE SUPPORT EQUIPMENT		56,073				
		Torpedoes and Related Equipment						
1507	20	ASW TARGETS		23,973				23,973
		Mod of Torpedoes and Related Equipment						
1507	21	MK-46 TORPEDO MODS		61,413				61,413
1507	22	MK-48 TORPEDO ADCAP MODS		61,185				61,185
1507	23	QUICKSTRIKE MINE		2,981				2,981
		Support Equipment						
1507	24	TORPEDO SUPPORT EQUIPMENT		23,401				23,401
1507	25	ASW RANGE SUPPORT		12,935				12,935
		Destination Transportation						
1507	26	FIRST DESTINATION TRANSPORTATION		3,123				3,123
		Other Weapons						
		Guns and Gun Mounts						
1507	27	SMALL ARMS AND WEAPONS		2,195				2,195
1507	28	COAST GUARD WEAPONS		5,349				5,349
1507	29	AIRBORNE MINE NEUTRALIZATION SYSTEMS						
		Modification of Guns and Gun Mounts						
1507	30	CIWS MODS		86,128				96,128
		Block 1B upgrade					10,000	
1507	31	5/54 GUN MOUNT MODS					[10,000]	
1507	32	GUN MOUNT MODS		25,858				25,858
		Other						
1507	33	PIONEER		8,775				8,775
1507	34	CRUISER MODERNIZATION WEAPONS		8,760				8,760

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>	<u>Cost</u>
1507	35	CANCELLED ACCOUNT ADJUSTMENTS						
		<b>Spares and Repair Parts</b>						
1507	36	SPARES AND REPAIR PARTS		68,009			68,009	
		<b>Total - Weapons Procurement, Navy</b>		<b>2,101,529</b>	<b>82,300</b>		<b>2,183,829</b>	
		<b>Procurement of Ammunition, Navy &amp; Marine Corps</b>						
		<b>Proc Ammo, Navy</b>						
		<b>Navy Ammunition</b>						
1508	1	GENERAL PURPOSE BOMBS						181,452
1508	2	JDAM	6,620	181,189		6,620		151,189
1508	3	AIRBORNE ROCKETS, ALL TYPES		34,151				34,151
1508	4	MACHINE GUN AMMUNITION		25,674				25,674
1508	5	PRACTICE BOMBS		53,577				53,577
1508	6	CARTRIDGES & CART ACTUATED DEVICES		26,182				26,182
1508	7	AIRCRAFT ESCAPE ROCKETS		10,735				10,735
1508	8	AIR EXPENDABLE COUNTERMEASURES		48,674				48,674
1508	9	JATOS		4,502				4,502
1508	10	5 INCH/54 GUN AMMUNITION		19,749				19,749
1508	11	EXTENDED RANGE GUIDED MUNITIONS (ERGM)		500				500
1508	12	76MM GUN AMMUNITION		1,153				1,153
1508	13	OTHER SHIP GUN AMMUNITION		19,199				19,199
1508	14	SMALL ARMS & LANDING PARTY AMMO		23,235				23,235
1508	15	PYROTECHNIC AND DEMOLITION		10,133				10,133
1508	16	MINE NEUTRALIZATION DEVICES						
1508	17	JUDGMENT FUND						
1508	18	AMMUNITION LESS THAN \$5 MILLION		3,135				3,135

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Proc Ammo, MC</b>						
		<b>Marine Corps Ammunition</b>						
1508	19	5.56 MM, ALL TYPES		35,129				35,129
1508	20	7.62 MM, ALL TYPES		8,708				8,708
1508	21	LINEAR CHARGES, ALL TYPES		10,286				14,286
		M59A1 linear demolition charge				4,000		
						[2,000]		
		M58A4 HE linear demolition charge				[2,000]		
1508	22	.50 CALIBER		1,898				1,898
1508	23	40 MM, ALL TYPES		23,614				25,614
		40mm HEDP				2,000		
						[2,000]		
1508	24	60MM, ALL TYPES		10,446				12,946
		60mm high-explosive cartridge				2,500		
						[2,500]		
1508	25	81MM, ALL TYPES		24,319		1,000		25,319
		M853A1 illumination cartridge				[1,000]		
1508	26	120MM, ALL TYPES		15,365				15,365
1508	27	CTG 25MM, ALL TYPES		3,749				3,749
1508	28	9 MM ALL TYPES		7,644				7,644
1508	29	GRENADES, ALL TYPES		5,042				5,042
1508	30	STINGER SLEP						
1508	31	ROCKETS, ALL TYPES		14,050				19,050
		Shoulder launched, multi-purpose assault weapon				5,000		
		M72 improved light anti-armor weapon				[3,000]		
						[2,000]		
1508	32	ARTILLERY, ALL TYPES		55,599				55,599
1508	33	EXPEDITIONARY FIGHTING VEHICLE		2,474				2,474
1508	34	DEMOLITION MUNITIONS, ALL TYPES		3,270				3,270
1508	35	FUZE, ALL TYPES		13,816				13,816
1508	36	NON LETHALS		1,145				1,145



# Title I - Procurement

(Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Request			Change			Authorized		
			Qty	Cost	Qty	Qty	Cost	Cost	Qty	Cost	Cost
1508	37	AMMO MODERNIZATION		7,123						7,123	
1508	38	ITEMS LESS THAN \$5 MILLION		1,723						1,723	
		<b>Total - Procurement of Ammunition, Navy &amp; Marine Corps</b>		<b>858,640</b>			<b>14,500</b>			<b>873,140</b>	
		<b>Shipbuilding and Conversion, Navy</b>									
		<b>Other Warships</b>									
1611	1	CARRIER REPLACEMENT PROGRAM									
1611	2	ADVANCE PROCUREMENT (CY)		626,084						626,084	
1611	3	SSN-21									
1611	3	COMPLETION OF PY PROGRAMS									
1611	4	VIRGINIA CLASS SUBMARINE	1	2,253,513					1	2,253,513	
1611	4	LESS: ADVANCE PROCUREMENT (PY)		-672,370						-672,370	
1611	5	ADVANCE PROCUREMENT (CY)		871,864						871,864	
1611	4	COMPLETION OF PY PROGRAMS									
1611	6	SSGN CONVERSION	1	783,793					1	783,793	
1611	6	LESS: ADVANCE PROCUREMENT (PY)		-314,567						-314,567	
1611	7	ADVANCE PROCUREMENT (CY)		48,000						48,000	
1611	8	CRUISER CONVERSION									
1611	8	LESS: ADVANCE PROCUREMENT (PY)									
1611	9	ADVANCE PROCUREMENT (CY)									
1611	10	SSN ERO		333,061						333,061	
1611	10	LESS: ADVANCE PROCUREMENT (PY)		90,699						90,699	
1611	11	ADVANCE PROCUREMENT (CY)		-90,699						-90,699	
1611	11	ADVANCE PROCUREMENT (CY)		19,368						19,368	
1611	12	SSBN ERO	1	292,450					1	292,450	
1611	12	LESS: ADVANCE PROCUREMENT (PY)		-30,221						-30,221	
1611	13	ADVANCE PROCUREMENT (CY)		72,171						72,171	

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Request			Change			Authorized		
			Qty	Cost		Qty	Cost		Qty	Cost	
1611	14	DDG-51	3	3,504,970					3	3,504,970	
1611	14	LESS: ADVANCE PROCUREMENT (PY)									
1611	14	COMPLETION OF PY PROGRAMS		-60,020						-60,020	
		<b>Amphibious Ships</b>									
1611	15	LHD-1 AMPHIBIOUS ASSAULT SHIP		1,091,185						1,091,185	
1611	15	LESS: ADVANCE PROCUREMENT (PY)		-855,167						-855,167	
1611	16	LPD-17	1	1,103,620					1	1,103,620	
1611	16	LESS: ADVANCE PROCUREMENT (PY)		-137,061						-137,061	
1611	17	ADVANCE PROCUREMENT (CY)									
1611	17A	LHA-R - acceleration and incremental funding									
		<b>Auxiliaries, Craft and Prior Yr Program Costs</b>									
1611	18	LCU(X)	1	25,048					1	25,048	
1611	19	OUTFITTING		399,327						399,327	
1611	20	SERVICE CRAFT		32,099						32,099	
1611	21	LCAC SLEP	5	90,490					5	90,490	
1611	21	COMPLETION OF PY PROGRAMS									
1611	22	CANCELLED ACCOUNT ADJUSTMENTS									
1611	23	MINE HUNTER									
1611	24	COMPLETION OF PY SHIPBUILDING PROGRAMS		484,390						484,390	
1611	24A	Power unit assembly facility								15,000	
		<b>Total - Shipbuilding and Conversion, Navy</b>		<b>9,962,027</b>			<b>165,000</b>			<b>10,127,027</b>	
		<b>Other Procurement, Navy</b>									
		<b>Ships Support Equipment</b>									
		<b>Ship Propulsion Equipment</b>									
1810	1	LM-2500 GAS TURBINE		9,009							9,009

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
1810	2	ALLISON 501K GAS TURBINE		22,271				22,271
1810	3	Propellers						
1810	4	Navigation Equipment		16,180				16,180
1810	5	OTHER NAVIGATION EQUIPMENT						
1810	5	Underway Replenishment Equipment		1,530				1,530
1810	5	UNDERWAY REPLENISHMENT EQUIPMENT						
1810	6	Periscopes						
1810	6	SUB PERISCOPES & IMAGING EQUIP	5	62,050		5		62,050
1810	7	Other Shipboard Equipment						
1810	7	FIREFIGHTING EQUIPMENT		24,731				24,731
1810	8	COMMAND AND CONTROL SWITCHBOARD		3,768				3,768
1810	9	POLLUTION CONTROL EQUIPMENT		42,612				42,612
1810	10	SUBMARINE SUPPORT EQUIPMENT		21,181				26,181
1810	10	High Performance Brush Program			5,000			
1810	11	VIRGINIA CLASS SUPPORT EQUIPMENT		56,051	[5,000]			56,051
1810	12	SUBMARINE BATTERIES		26,077				26,077
1810	13	STRATEGIC PLATFORM SUPPORT EQUIP		55,166				55,166
1810	14	DSSP EQUIPMENT		21,131				21,131
1810	15	CG-MODERNIZATION		114,139				114,139
1810	16	LCAC		8,365				8,365
1810	17	MINESWEEPING EQUIPMENT		8,046				8,046
1810	18	ITEMS LESS THAN \$5 MILLION		148,637				152,637
1810	18	Machinery Control Surveillance System			4,000			
1810	19	CHEMICAL WARFARE DETECTORS		4,725	[4,000]			4,725
1810	20	SUBMARINE LIFE SUPPORT SYSTEM		13,940				13,940

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	FY 2005	Senate Change	Senate Authorized
Account	Line	Program Title	Request Qty Cost Qty Cost
		Reactor Plant Equipment	
1810	21	REACTOR POWER UNITS	356,372 356,372
1810	22	REACTOR COMPONENTS	217,175 217,175
		Ocean Engineering	
1810	23	DIVING AND SALVAGE EQUIPMENT	8,875 8,875
		Small Boats	
1810	24	STANDARD BOATS	18,328 18,328
		Training Equipment	
1810	25	OTHER SHIPS TRAINING EQUIPMENT	8,848 8,848
		Production Facilities and Equipment	
1810	26	OPERATING FORCES IPE	22,384 22,384
		Other Ship Support	
1810	27	NUCLEAR ALTERATIONS	133,999 133,999
		Drug Interdiction Support	
1810	28	DRUG INTERDICTION SUPPORT	
		Communications and Electronics Equipment	
		Ship Radars	
1810	29	SFQ-9B RADAR	3,584 7,000 [7,000]
		AN/SFQ-9B shipboard radar transmitter upgrade	
1810	30	RADAR SUPPORT	
1810	31	TISS	
		Ship Sonars	
1810	32	AN/SQQ-89 SURF ASW COMBAT SYSTEM	
1810	33	SSN ACOUSTICS	225,028 225,028
1810	34	UUV PROGRAM	61,253 61,253
1810	35	UNDERSEA WARFARE SUPPORT EQUIPMENT	14,116 5,000 [5,000]
		Surface Sonar Dome Window prototype	

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Change	Cost	Qty	Authorized
1810	36	SONAR SWITCHES AND TRANSDUCERS		13,330				Cost
		ASW Electronic Equipment						13,330
1810	37	SUBMARINE ACOUSTIC WARFARE SYSTEM		20,857				20,857
1810	38	SSTD		22,273				22,273
1810	39	FIXED SURVEILLANCE SYSTEM		55,325				55,325
1810	40	SURTASS		7,166				7,166
1810	41	TACTICAL SUPPORT CENTER		5,100				5,100
		Electronic Warfare Equipment						
1810	42	AN/SUQ-32		18,728				18,728
1810	43	INFORMATION WARFARE SYSTEMS		4,034				4,034
		Reconnaissance Equipment						
1810	44	SHIPBOARD IW EXPLOIT		69,194				69,194
		Submarine Surveillance Equipment						
1810	45	SUBMARINE SUPPORT EQUIPMENT PROG		78,968				78,968
		Other Ship Electronic Equipment						
1810	46	NAVY TACTICAL DATA SYSTEM		57,531				57,531
1810	47	COOPERATIVE ENGAGEMENT CAPABILITY		63,363				63,363
1810	48	GCCS-M EQUIPMENT		26,208				26,208
1810	49	NAVAL TACTICAL COMMAND SUPPORT SYSTEM (NTCS)		2,386				2,386
1810	50	ATDLS		77,956				77,956
1810	51	MINESWEEPING SYSTEM REPLACEMENT	3	11,650			3	11,650
1810	52	NAVSTAR GPS RECEIVERS (SPACE)		4,170				4,170
1810	53	ARMED FORCES RADIO AND TV		5,265				5,265
1810	54	STRATEGIC PLATFORM SUPPORT EQUIP						
		Training Equipment						
1810	55	OTHER SPAWAR TRAINING EQUIPMENT		42,913				42,913
1810	56	OTHER TRAINING EQUIPMENT						

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>
					<u>Qty</u>	<u>Cost</u>
		<b>Aviation Electronic Equipment</b>				
1810	57	MATCALS		15,614		15,614
1810	58	SHIPBOARD AIR TRAFFIC CONTROL		7,695		7,695
1810	59	AUTOMATIC CARRIER LANDING SYSTEM		12,515		12,515
1810	60	NATIONAL AIR SPACE SYSTEM		16,122		16,122
1810	61	AIR STATION SUPPORT EQUIPMENT		3,640		3,640
1810	62	MICROWAVE LANDING SYSTEM		7,232		7,232
1810	63	FACSFAC		3,712		3,712
1810	64	ID SYSTEMS		18,296		18,296
1810	65	TAC A/C MISSION PLANNING SYS(TAMPS)		9,098		9,098
		<b>Other Shore Electronic Equipment</b>				
1810	66	DEPLOYABLE JOINT COMMAND AND CONT		32,469		32,469
1810	67	NAVAL SPACE SURVEILLANCE SYSTEM				
1810	68	DIMHRS				
1810	69	COMMON IMAGERY GROUND SURFACE SYSTEMS		53,173		53,173
1810	70	RADIAC		9,087		9,087
1810	71	GPETE		7,010		7,010
1810	72	INTEG COMBAT SYSTEM TEST FACILITY		4,662		4,662
1810	73	EMI CONTROL INSTRUMENTATION		5,872		5,872
1810	74	ITEMS LESS THAN \$5 MILLION		12,058		12,058
		<b>Shipboard Communications</b>				
1810	75	SHIPBOARD TACTICAL COMMUNICATIONS		14,077		14,077
1810	76	SHIP COMMUNICATIONS AUTOMATION		159,718		159,718
1810	77	COMMUNICATIONS ITEMS UNDER \$5M		11,921		14,921
		Navy shipboard communications			3,000	
					[3,000]	
		<b>Submarine Communications</b>				
1810	78	SUBMARINE BROADCAST SUPPORT		17,802		17,802

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>	<u>Cost</u>
1810	79	SUBMARINE COMMUNICATION EQUIPMENT						
		Submarine high data rate					19,000	113,533
				94,533			[19,000]	
1810	80	Satellite Communications						
		SATELLITE COMMUNICATIONS SYSTEMS		130,564				130,564
1810	81	Shore Communications						
1810	81	JCS COMMUNICATIONS EQUIPMENT		3,023				3,023
1810	82	ELECTRICAL POWER SYSTEMS		1,291				1,291
1810	83	NSIPS		289				289
1810	84	JEDMICS						
1810	85	NAVAL SHORE COMMUNICATIONS		57,066				57,066
		Cryptographic Equipment						
1810	86	INFO SYSTEMS SECURITY PROGRAM (ISSP)		88,418				88,418
1810	87	Cryptologic Equipment						
		CRYPTOLOGIC COMMUNICATIONS EQUIP		26,111				26,111
1810	88	Other Electronic Support						
		COAST GUARD EQUIPMENT		7,638				7,638
1810	89	Drug Interdiction Support						
		OTHER DRUG INTERDICTION SUPPORT						
		Aviation Support Equipment						
1810	90	Sonobuoys						
		SONOBUOYS - ALL TYPES		50,081				50,081
1810	91	Aircraft Support Equipment						
		WEAPONS RANGE SUPPORT EQUIPMENT		44,643			3,000	47,643
		Joint threat emitter					[3,000]	
1810	92	EXPEDITIONARY AIRFIELDS		7,527				7,527
1810	93	AIRCRAFT REARMING EQUIPMENT		11,667				11,667
1810	94	AIRCRAFT LAUNCH & RECOVERY EQUIPMENT		21,275				21,275

**Title I - Procurement**  
(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Change	Authorized	Qty	Cost
1810	95	METEOROLOGICAL EQUIPMENT		20,134				20,134
1810	96	OTHER PHOTOGRAPHIC EQUIPMENT		1,438				1,438
1810	97	AVIATION LIFE SUPPORT		19,040				19,040
1810	98	AIRBORNE MINE COUNTERMEASURES		73,081				73,081
1810	99	LAMPS MK III SHIPBOARD EQUIPMENT		16,433				16,433
1810	100	OTHER AVIATION SUPPORT EQUIPMENT		6,157				6,157
		<b>Ordnance Support Equipment</b>						
		<b>Ship Gun System Equipment</b>						
1810	101	GUN FIRE CONTROL EQUIPMENT		7,610				7,610
1810	102	NAVAL FIRES CONTROL SYSTEM		11,481				11,481
1810	103	GUN FIRE CONTROL EQUIPMENT						
		<b>Ship Missile System Equipment</b>						
1810	104	NATO SEASPARROW		25,453				25,453
1810	105	RAM GMLS		22,968				22,968
1810	106	SHIP SELF DEFENSE SYSTEM		42,130				42,130
1810	107	AEGIS SUPPORT EQUIPMENT		57,517				66,517
		<b>Integrated bridge</b>						
1810	108	SURFACE TOMAHAWK SUPPORT EQUIPMENT		69,732				69,732
1810	109	SUBMARINE TOMAHAWK SUPPORT EQUIP		5,469				5,469
1810	110	VERTICAL LAUNCH SYSTEMS		9,829				9,829
		<b>FBM Support Equipment</b>						
1810	111	STRATEGIC MISSILE SYSTEMS EQUIP		102,073				102,073
		<b>ASW Support Equipment</b>						
1810	112	SSN COMBAT CONTROL SYSTEMS		147,481				147,481
1810	113	SUBMARINE ASW SUPPORT EQUIPMENT		4,849				4,849
1810	114	SURFACE ASW SUPPORT EQUIPMENT		4,539				4,539
1810	115	ASW RANGE SUPPORT EQUIPMENT		7,175				7,175
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
		<b>Integrated bridge</b>						
		<b>Ship Gun System Equipment</b>						
		<b>Ship Missile System Equipment</b>						
		<b>Integrated bridge</b>						
		<b>FBM Support Equipment</b>						
		<b>ASW Support Equipment</b>						
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# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>			<u>Senate</u>			<u>Senate</u>		
			<u>Qty</u>	<u>Request</u>	<u>Cost</u>	<u>Qty</u>	<u>Change</u>	<u>Cost</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Other Ordnance Support Equipment</b>									
1810	116	EXPLOSIVE ORDNANCE DISPOSAL EQUIP		25,058							25,058
1810	117	ITEMS LESS THAN \$5 MILLION		4,037							4,037
		<b>Other Expendable Ordnance</b>									
1810	118	ANTI-SHIP MISSILE DECOY SYSTEM		46,553				6,100			52,653
		NULKA decoys						[6,100]			
1810	119	SURFACE TRAINING DEVICE MODS		6,347							6,347
1810	120	SUBMARINE TRAINING DEVICE MODS		39,405				4,000			43,405
		Submarine mobile performance support systems						[4,000]			
		<b>Civil Engineering Support Equipment</b>									
1810	121	ARMORED SEDANS		1,507							1,507
1810	122	PASSENGER CARRYING VEHICLES		2,321							2,321
1810	123	GENERAL PURPOSE TRUCKS		19,197							19,197
1810	124	CONSTRUCTION & MAINTENANCE EQUIP		12,345							12,345
1810	125	FIRE FIGHTING EQUIPMENT		30,926							30,926
1810	126	TACTICAL VEHICLES		11,607							11,607
1810	127	AMPHIBIOUS EQUIPMENT		11,396							11,396
1810	128	POLLUTION CONTROL EQUIPMENT		13,686							13,686
1810	129	ITEMS UNDER \$5 MILLION		1,125							1,125
1810	130	PHYSICAL SECURITY VEHICLES									
		<b>Supply Support Equipment</b>									
1810	131	MATERIALS HANDLING EQUIPMENT		12,754							12,754
1810	132	OTHER SUPPLY SUPPORT EQUIPMENT		11,523				14,500			26,023
		Serial Number Tracking System						[8,000]			
		Radio frequency identification						[6,500]			
1810	133	FIRST DESTINATION TRANSPORTATION		5,578							5,578
1810	134	SPECIAL PURPOSE SUPPLY SYSTEMS		82,158							82,158

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Personnel and Command Support Equipment</b>						
		<b>Training Devices</b>						
1810	135	TRAINING SUPPORT EQUIPMENT		18,756				18,756
		<b>Command Support Equipment</b>						
1810	136	COMMAND SUPPORT EQUIPMENT		20,658		10,000		30,658
		Man Overboard Identification System				[10,000]		
1810	137	EDUCATION SUPPORT EQUIPMENT		5,507				5,507
1810	138	MEDICAL SUPPORT EQUIPMENT		8,459				8,459
1810	139	INTELLIGENCE SUPPORT EQUIPMENT	[ ]	[ ]				
1810	140	OPERATING FORCES SUPPORT EQUIPMENT		7,826				7,826
1810	141	C4ISR EQUIPMENT		27,582				27,582
1810	142	ENVIRONMENTAL SUPPORT EQUIPMENT		13,155				13,155
1810	143	PHYSICAL SECURITY EQUIPMENT		194,214				194,214
1811	144	CLASSIFIED PROGRAMS	[ ]	[ ]				
1812	145	SPECIAL PROGRAM	[ ]	[ ]				
		<b>Productivity Programs</b>						
1810	146	JUDGMENT FUND REIMBURSEMENT						
		<b>Other</b>						
1810	147	CANCELLED ACCOUNT ADJUSTMENTS						
		<b>Spares and Repair Parts</b>						
1810	148	SPARES AND REPAIR PARTS		245,476		2,000		247,476
		Protective covers				[2,000]		
1810	999	CLASSIFIED PROGRAMS		18,646				18,646
		Financial information systems				-20,900		-20,900
		<b>Total - Other Procurement, Navy</b>		<b>4,834,278</b>		<b>70,700</b>		<b>4,904,978</b>

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Procurement, Marine Corps</b>						
		<b>Weapons and Combat Vehicles</b>						
		<b>Tracked Combat Vehicles</b>						
1109	1	AAV7A1 PIP	60	58,596		23,200	60	81,796
		AAV RAM/RS upgrade				[23,200]		
1109	2	EXPEDITIONARY FIGHTING VEHICLE		67,701				67,701
1109	3	LAV PIP		41,588				41,588
1109	4	IMPROVED RECOVERY VEHICLE (IRV)						
1109	5	MODIFICATION KITS (TRKD VEH)		11,844				11,844
1109	6	M1A1 FIREPOWER ENHANCEMENTS		36,873				36,873
		<b>Artillery and Other Weapons</b>						
1109	7	HIMARS	1	16,340			1	16,340
1109	8	155MM LIGHTWEIGHT TOWED HOWITZER	97	175,445			97	175,445
1109	9	MOD KITS (ARTILLERY)		3,248				3,248
1109	10	MARINE ENHANCEMENT PROGRAM		4,024				4,024
1109	11	WEAPONS AND COMBAT VEHICLES UNDER \$5 MILLION		4,888		5,800		10,688
		Rapid fielding initiative (Additional M249 Saws)				[5,800]		
		<b>Weapons</b>						
1109	12	MODULAR WEAPON SYSTEM		10,051				10,051
		<b>Other Support</b>						
1109	13	OPERATIONS OTHER THAN WAR		1,509				1,509
		<b>Guided Missiles and Equipment</b>						
		<b>Guided Missiles</b>						
1109	14	EADS MOD		10,314				10,314

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
1109	15	JAVELIN			200	200	200	9,800
		Additional Javelin anti-tank missiles						
1109	16	PEDESTAL MOUNTED STINGER (PMS) (MYP)				9,800		9,800
1109	17	HIMARS ROCKETS		10,004		[9,800]		10,004
1109	18	PREDATOR (SRAW)		1,325				1,325
		Other Support						
1109	19	MODIFICATION KITS		595				595
		Communications and Electronics Equipment						
		Vehicle Mounted Radios and Equipment						
1109	20	SMALL UNIT REMOTE SCOUTING SYSTEM		8,866				8,866
		Command and Control Systems						
1109	21	UNIT OPERATIONS CENTER		35,933				37,933
		USMC Baseline Combat Operations Center				2,000		
1109	22	GLOBAL COMBAT SUPPORT SYSTEM		21,664		[2,000]		
		Radio frequency identification				8,300		29,964
1109	23	MULTIPLE ROLE RADAR SYSTEM		2,283				2,283
1109	24	JOINT TACTICAL RADIO SYSTEMS		26,009				40,209
		High frequency manpack radio AN/PRC-150				14,200		
1109	25	TRANSITION SWITCH MODULE		9,245		[14,200]		9,245
1109	26	COMPLIMENTARY LOW ALTITUDE WEAPON		4,412				4,412
		Repair and Test Equipment						
1109	27	AUTO TEST EQUIP SYS		15,823				15,823
1109	28	GENERAL PURPOSE ELECTRONIC TEST EQUIP.		14,495				14,495
1109	29	CALIBRATION FACILITIES		2,305				2,305
		Radar Equipment (Non-fel)						
1109	30	RADAR SET AN/TPS-59		24,466				24,466

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>
								<u>Cost</u>
		<b>Intell/Comm Equipment (Non-tel)</b>						
1109	31	TACTICAL REMOTE SENSOR SYSTEM		10,622				10,622
1109	32	INTELLIGENCE SUPPORT EQUIPMENT		15,842				15,842
1109	33	MOD KITS (INTEL)		9,551				9,551
1109	34	ITEMS UNDER \$5 MILLION (INTELL)						
		<b>Repair and Test Equipment (Non-tel)</b>						
1109	35	GENERAL PURPOSE MECHANICAL TMDE		1,790				1,790
		<b>Other Comm/Elec Equipment (Non-tel)</b>						
1109	36	NIGHT VISION EQUIPMENT		26,100		9,900		36,000
		Rapid fielding initiative (Night vision device PVS-14)				[5,800]		
		Rapid fielding initiative (Night vision device PVS-17)				[4,100]		
		<b>Other Support (Non-tel)</b>						
1109	37	ITEMS UNDER \$5 MILLION (COMM & ELEC)		461				461
1109	38	COMMON COMPUTER RESOURCES		61,989				61,989
1109	39	COMMAND POST SYSTEMS		8,144				8,144
1109	40	RADIO SYSTEMS		14,476		12,000		26,476
		Lightweight Multi-band Satellite System				[12,000]		
1109	41	COMM SWITCHING & CONTROL SYSTEMS		26,145				26,145
1109	42	COMM & ELEC INFRASTRUCTURE SUPPORT		24,778				24,778
1109	43	MOD KITS MAGTF C41		984		13,000		13,984
		Communication enitter sensing and attacking system				[13,000]		
1109	44	AIR OPERATIONS C2 SYSTEMS		10,290				10,290
1109	45	INTELLIGENCE C2 SYSTEMS		1,211				1,211
1109	46	FIRE SUPPORT SYSTEM		10,215				10,215

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Request			Change			Authorized		
			Qty	Cost		Qty	Cost		Qty	Cost	
		<b>Support Vehicles</b>									
		<b>Administrative Vehicles</b>									
1109	47	COMMERCIAL PASSENGER VEHICLES	37	1,096					37	1,096	
1109	48	COMMERCIAL CARGO VEHICLES		11,563						11,563	
		<b>Tactical Vehicles</b>									
1109	49	5/4T TRUCK HMMWV (MYP)	1,830	131,276					1,830	131,276	
1109	50	MEDIUM TACTICAL VEHICLE REPLACEMENT									
1109	51	LOGISTICS VEHICLE SYSTEM REP		3,343						3,343	
1109	52	FAMILY OF TACTICAL TRAILERS		942						942	
		<b>Other Support</b>									
1109	53	ITEMS LESS THAN \$5 MILLION		3,598						3,598	
		<b>Engineer and Other Equipment</b>									
1109	54	ENVIRONMENTAL CONTROL EQUIP ASSORT		2,869						2,869	
1109	55	COMBAT BREACHER VEHICLE		4,621						4,621	
1109	56	BULK LIQUID EQUIPMENT		11,524						11,524	
1109	57	TACTICAL FUEL SYSTEMS		5,219						5,219	
1109	58	DEMOLITION SUPPORT SYSTEMS		3,422						10,822	
		Handheld Standoff Mine Detection System								7,400	
1109	59	POWER EQUIPMENT ASSORTED		10,657						10,657	
1109	60	SHOP EQ CONTACT MAINTENANCE (SECM)									
1109	61	FAMILY OF EOD EQUIPMENT		4,724						4,724	
1109	62	BRIDGE BOATS		5,307						5,307	
		<b>Material Handling Equipment</b>									
1109	63	AMPHIBIOUS RAID EQUIPMENT		15,771						15,771	
1109	64	PHYSICAL SECURITY EQUIPMENT		4,979						4,979	
1109	65	GARRISON MOBILE ENGR EQUIP		10,927						10,927	
1109	66	MATERIAL HANDLING EQUIP		21,190						21,190	

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>
1109	67	FIRST DESTINATION TRANSPORTATION		5,715				5,715
		General Property						
1109	68	FIELD MEDICAL EQUIPMENT		6,027		7,500		13,527
		Combat casualty care equipment				[3,500]		
		Rapid infusion pumps				[4,000]		
1109	69	TRAINING DEVICES		24,214				24,214
1109	70	CONTAINER FAMILY		5,244				5,244
1109	71	FAMILY OF CONSTRUCTION EQUIPMENT		15,067				15,067
1109	72	RAPID DEPLOYABLE KITCHEN						
		Other Support						
1109	73	FAMILY OF INCIDENT RESPONSE		2,804				2,804
1109	74	MODIFICATION KITS		2,901				2,901
1109	75	ITEMS LESS THAN \$5 MILLION		5,713				5,713
1109	76	CANCELLED ACCOUNT ADJUSTMENT (M)						
		Spares and Repair Parts						
1109	77	SPARES AND REPAIR PARTS		26,946				26,946
		Total - Procurement, Marine Corps		1,190,103		113,100		1,303,203

**LHA(R) amphibious assault ship program (sec. 121)**

The committee recommends a provision that would authorize the Secretary of the Navy to procure the first amphibious assault ship of the LHA(R)-class, subject to appropriations for that purpose. The provision would also make available \$150.0 million in Shipbuilding and Conversion, Navy (SCN), for the advance procurement and advance construction of components for that ship. The provision also would authorize the Secretary of the Navy to enter into a contract or contracts with the shipbuilder and other entities for the advance procurement and advance construction of those components.

The LHA(R)-class will replace the aging LHA-class amphibious assault ship, which will begin reaching the end of service life in 2011. The advance design work on LHA(R) began in fiscal year 2003 and continues to date. The Future Years Defense Program submitted with the budget request included full funding for the first LHA(R)-class amphibious assault ship in fiscal year 2008. The committee understands that acceleration of this ship, by providing the first increment of SCN funding in fiscal year 2005, would reduce the cost of this ship by \$150.0 million. The Chief of Naval Operations and the Commandant of the Marine Corps have included this acceleration on their Unfunded Priority Lists. Therefore, the committee recommends an increase of \$150.0 million for advance procurement and advance construction of components for the first amphibious assault ship of the LHA(R)-class.

**Multiyear procurement authority for the lightweight 155 millimeter howitzer program (sec. 122)**

The committee recommends a provision that would authorize the Secretary of the Navy to enter into a multiyear contract for procurement of the lightweight 155 millimeter howitzer. The lightweight 155 millimeter howitzer is currently scheduled to complete its Initial Operational Test and Evaluation (IOT&E) in December 2004. The committee recommends a limitation in the provision that would delay award of a multiyear procurement contract for the lightweight 155 millimeter howitzer until, as a result of operational testing, the howitzer is recommended for use in the Marine Corps.

**Pilot program for flexible funding of submarine engineered refueling overhaul and conversions (sec. 123)**

The committee recommends a provision that would establish a pilot program to permit flexible funding of submarine engineered refueling overhaul and conversions from October 1, 2004, to September 30, 2012.

Submarine engineered refueling overhaul and conversions are funded from Shipbuilding and Conversion, Navy (SCN). During the course of most ship overhauls or conversions, items which were not included in the original work package are discovered. These items could be corrected most efficiently while the ship is in the ongoing overhaul and conversion process, rather than waiting for a subsequent shipyard availability period.



This pilot program would allow the Navy to transfer appropriated funds from other appropriations, and merge these transferred funds with the SCN funds appropriated for the submarine engineered refueling overhaul and conversion to cover the cost of items not included in the original work package. The other appropriations that could be used for this purpose include: (1) other programs within SCN; (2) Weapons Procurement, Navy; (3) Other Procurement, Navy; and (4) Operation and Maintenance, Navy.

The provision would only allow the Navy to transfer funds when there is either: (1) an increase in the size of the workload to meet the requirements for the submarine engineered refueling overhaul and conversion; or (2) a revision of the original work package resulting from a new engineered refueling overhaul and conversion requirement.

The provision would require that the Secretary of the Navy, 30 days before any transfer of funds could take place, report to the congressional defense committees on: (1) the purpose of the transfer; (2) the amount of the transfer; (3) the account from which the transfer is being made; (4) the program, project, or activity from which the transfer is being made; (5) the account to which the funds are being transferred; and (6) the implications of the transfer on the total cost of the engineered refueling overhaul and conversion program.

The provision would also require the Secretary to make a final report to the congressional defense committees, which evaluates the efficacy of the program no later than October 1, 2011.

## **Other Navy Programs**

### **Navy Aircraft**

#### **MH-60R multi-mission helicopter**

The budget request included \$338.5 million in Aircraft Procurement, Navy (APN), for the procurement of eight MH-60R multi-mission helicopters, and \$70.6 million in advance procurement for MH-60R helicopters. In fiscal year 2004, six MH-60R helicopters were authorized and appropriated. In a reprogramming action request which was sent to the committee in February 2004, the Department of Defense requested that the quantity of MH-60R helicopters to be procured in fiscal year 2004 be reduced to four due to testing issues experienced during the final stages of the development program. The Department has subsequently withdrawn that reprogramming request. Since this offset was identified by the Department but not used, the committee recommends a decrease of \$54.5 million for MH-60R helicopters, a decrease of \$18.2 million in initial spares for MH-60R helicopters, and a decrease of \$9.4 million in advance procurement for MH-60R helicopters, for a total decrease of \$82.1 million.

#### **C-37 aircraft**

The budget request included \$53.3 million in Aircraft Procurement, Navy (APN), to procure one C-37 aircraft. The C-37 provides long-range executive transport for the Chief of Naval Operations, Combatant Commanders, and their staff. The aircraft currently in

use will have reached or exceeded their fatigue life in fiscal year 2006. The aircraft in the budget request is the third of the required five aircraft. The Chief of Naval Operations has included the procurement of an additional C-37 aircraft on his Unfunded Priority List. The committee recommends an increase of \$53.3 million in APN for an additional C-37 aircraft.

#### **T-48 aircraft**

The budget request included \$52.4 million in Aircraft Procurement, Navy (APN), for the procurement of one T-48 aircraft. The T-48 was to be a replacement for the T-39 aircraft used to train Naval Flight Officers (NFOs). The Navy has informed the committee that a review of the NFO training requirements has generated a new approach, and the Navy will now use the T-45 aircraft for NFO training. The committee recommends a decrease of \$52.4 million in APN, line 17, with an increase of the same amount in APN, line 18 for the procurement of two additional T-45 aircraft.

#### **T-45 training system**

The budget request included \$253.6 million in Aircraft Procurement, Navy (APN), for the procurement of eight T-45 aircraft and associated training equipment. The committee has been informed that the Navy has decided to procure more T-45 aircraft for the purpose of training Naval Flight Officers (NFOs), instead of procuring the T-48 aircraft for the same purpose. The committee recommends an increase of \$52.4 million in APN for the procurement of two additional T-45 aircraft.

The committee is aware of ongoing discussions within the Navy concerning the final inventory requirements for T-45 aircraft. The current requirement remains at 234 aircraft, but ongoing studies may recommend a different number, based on several factors such as: (1) greater use of the T-6 joint primary aircraft training system; (2) a lower pilot training rate due to Navy and Marine Corps tactical aviation integration; (3) use of the T-45 for NFO training; and (4) the safety record for the T-45. The T-45 training system will be the advanced trainer for the Navy for decades to come. Therefore, the committee directs the Navy to determine its long-term jet trainer requirements to properly size a modern fleet to fully support the pilot training rate beyond fiscal year 2026.

#### **Joint primary aircraft training system**

The budget request included \$2.5 million in Aircraft Procurement, Navy (APN), for the procurement of support items for the joint primary aircraft training system (JPATS) for the Navy, but included no funds for Navy JPATS aircraft. While the Navy intends to delay procurement of JPATS aircraft until fiscal year 2007, the committee continues to support the acceleration of the procurement of JPATS to maximize the economies of scale in this joint program with the Air Force. The committee recommends an increase of \$24.0 million in APN for the procurement of four JPATS aircraft.

### **EA-6B aircraft reliability and sustainment**

The budget request included \$165.7 million in Aircraft Procurement, Navy (APN), for modifications for the EA-6B aircraft, including \$11.4 million for ALQ-99 electronic warfare pods and \$345,000 for J-52 engines. The Chief of Naval Operations' Unfunded Priority List included the following EA-6B modifications: (1) engineering change proposals which are necessary for reliability; (2) standard corrections to J-52 engine builds; (3) readiness issues with the ALQ-99 transmitter; and (4) necessary kits for Block 89A avionics. The EA-6B is a high-demand, low-density asset used by the Navy, Marine Corps, and the Air Force, which is a key enabler for joint operations. The committee recommends an increase in APN of \$20.0 million for EA-6B aircraft reliability and sustainment initiatives.

### **F/A-18 aircraft modifications**

The budget request included \$412.5 million in Aircraft Procurement, Navy (APN), for modifications to the F/A-18 aircraft, including \$103.2 million for the procurement of advanced targeting forward-looking infrared (ATFLIR) pods. The Chief of Naval Operations' Unfunded Priority List included a request for various F/A-18 upgrades, including ATFLIRs, ancillary armament equipment, and kits for engineering change proposal 560 (ECP-560) block II modifications. The committee recommends an increase in APN of \$8.0 million for three additional ATFLIR pods, an increase in APN of \$4.0 million for ancillary armament equipment, and an increase in APN of \$8.0 million for ECP-560 block II modifications, for a total authorization of \$432.5 million.

### **CH-46 lightweight armor crew seats**

The budget request included \$71.2 million in Aircraft Procurement, Navy (APN), for modifications to the H-46 series helicopter, but included no funding for the procurement of CH-46 lightweight armor crew seats. The CH-46E medium lift helicopter depends on net lifting capability to perform its mission, which has been degraded over the years because of an increase in the empty weight of the helicopter as capability is added to the platform. The committee recognizes that reducing the empty weight through weight reduction initiatives is a viable means of restoring mission effectiveness. Replacing crew legacy seats with light weight armor crew seats will increase helicopter payload by 140 pounds while adding protection to crew members. The committee notes that the Chief of Naval Operations has identified an CH-46 lightweight armor crew seats on its Unfunded Priority List for fiscal year 2005. The committee recommends an increase of \$8.0 million in APN, for 75 CH-46 lightweight armor crew seats, for a total authorization of \$79.2 million.

### **Night targeting system upgrade**

The budget request included \$2.2 million in Aircraft Procurement, Navy (APN), for H-1 helicopter modifications. The Marine Corps currently operates approximately 200 AH-1W Cobra attack helicopters with a night targeting system (NTS), which employs first generation forward-looking infrared technology. The com-

mittee understands that the Night Targeting System-Upgrade (NTS-U) will enhance existing NTS technology. Further, the committee notes that in support of Operation Iraqi Freedom, the Marine Corps accelerated the development of a NTS-U prototype from July 2004 to April 2004. The committee recommends an increase of \$5.0 million in APN, for the procurement of NTS-U units, for a total authorization of \$7.2 million.

#### **H-60 armed helicopter kits**

The budget request included \$11.6 million in Aircraft Procurement, Navy (APN), for modifications to the H-60 helicopter, including \$4.5 million for armed helicopter kits. These kits provide the SH-60B and HH-60B helicopters with forward-looking infrared night vision, laser designation, Hellfire missile carriage, and engagement capabilities. The Chief of Naval Operations has included additional armed helicopter kits on his Unfunded Priority List. The committee recommends an increase of \$5.0 million in APN for the procurement of additional armed helicopter kits.

#### **EP-3E aircraft modifications**

The budget request included \$28.3 million in Aircraft Procurement, Navy (APN), for modifications to the EP-3E aircraft, all of which is for the joint airborne signals intelligence architecture (JASA) modification (JMOD) program. This program upgrades the signals intelligence capabilities of the current EP-3E configuration. The Navy has initiated an effort to accelerate introduction of the JMOD capability for this high-demand, low-density asset. The committee recommends an increase of \$5.0 million in APN for additional JMOD hardware procurement and installations.

#### **P-3 aircraft modifications**

The budget request included \$125.0 million in Aircraft Procurement, Navy (APN), for modifications to the P-3 aircraft, including \$53.8 million for the procurement and installation of anti-surface warfare improvement (AIP) program kits. The budget request did not include funding for operational flight simulator upgrades.

AIP greatly expands the P-3C aircraft's capabilities to operate in the littoral environment with the addition of advanced technology sensors, expanded communications, upgraded weapon delivery capabilities, survivability upgrades, and improved operator situational awareness. The Chief of Naval Operations has included the procurement of additional P-3C AIP kits on his Unfunded Priority List. The committee recommends an increase of \$26.8 million in APN for the procurement of two additional AIP kits.

Extremely high operational tempo has consumed the fatigue life (FLE) of the P-3C aircraft at a much higher rate than planned, and measures must be taken to slow down that rate until introduction of the replacement platform, the multi-mission maritime aircraft. One way to decrease the FLE rate is to train aircrew in operational flight simulators, which need upgrading to current weapon system configuration if the training is to be relevant. The Chief of Naval Operations has included the upgrade of the P-3C operational flight simulator on his Unfunded Priority List. The com-

mittee recommends an increase of \$10.0 million in APN to upgrade the P-3C operational flight simulator.

#### **E-2C aircraft modifications**

The budget request included \$15.1 million in Aircraft Procurement, Navy (APN), for modifications to the E-2C aircraft, but included no funding for current E-2 aircraft production navigation equipment for Group II E-2C aircraft. The Chief of Naval Operations has included the procurement of this equipment on his Unfunded Priority List. The committee recommends an increase in APN of \$8.0 million to retrofit three E-2C Group II aircraft with production navigation equipment.

### **Navy Weapons**

#### **Tactical Tomahawk**

The budget request included \$256.2 million in Weapons Procurement, Navy (WPN), for the procurement of 293 Tactical Tomahawk cruise missiles. The Tomahawk is a long-range strike weapon that provides precision attack capability against land targets. The latest variant, the Block IV Tactical Tomahawk, is in low rate production. The Block IV Tactical Tomahawk is more responsive, flexible, and affordable than previous blocks, and is scheduled for a full rate production decision in June 2004. The Chief of Naval Operations has included the procurement of additional Tactical Tomahawk missiles on his unfunded priority list due to high Tomahawk usage rates during Operation Iraqi Freedom. The committee recommends an increase of \$20.0 million in WPN for the procurement of an additional 23 Tactical Tomahawk cruise missiles.

#### **Evolved sea sparrow missile**

The budget request included \$80.3 million in Weapons Procurement, Navy (WPN), for the procurement of 71 evolved Sea Sparrow missiles (ESSMs). The ESSM is the result of an international cooperative effort involving 10 countries to design, develop, test, and produce an improved version of the NATO Sea Sparrow missile. The ESSM provides a kinematic and guidance upgrade designed primarily for the anti-aircraft and subsonic cruise missile threat. The Chief of Naval Operations has included the procurement of additional ESSMs on his unfunded priority list. The committee recommends an increase of \$11.3 million in WPN for the procurement of 10 additional ESSMs.

#### **Joint standoff weapon**

The budget request included \$139.4 million in Weapons Procurement, Navy (WPN), for the procurement of 389 AGM-154 joint standoff weapons (JSOW), including \$64.8 million for the procurement of 173 AGM-154Cs, a unitary warhead variant of the JSOW. The Air Force recently decided to withdraw from the JSOW program, which will result in the production line operating at less than optimum efficiency, while increasing unit cost. To achieve a more economic production rate, the committee recommends an increase in WPN of \$5.0 million for the procurement of 15 additional AGM-154C JSOWs.

### **Hellfire missile**

The budget request included \$10.4 million in Weapons Procurement, Navy (WPN), for other missile support, but included no funding for the procurement of AGM-114 Hellfire missiles. The Hellfire is the Navy's and Marine Corps' primary helicopter precision-guided weapon. There is currently a war reserve inventory shortfall, and the procurement of additional Hellfire missiles is included on the Chief of Naval Operations and the Commandant of the Marine Corps' Unfunded Priority List. The committee recommends an increase in WPN of \$16.0 million for the procurement of 190 AGM-114 Hellfire missiles.

### **Weapons industrial facilities**

The budget request included \$4.0 million for various activities at government-owned, contractor operated weapons industrial facilities, but included no funding for the facilities at the Allegany Ballistics Laboratory (ABL). The committee recommends an increase of \$20.0 million for the facilities restoration program at ABL.

### **Close-in weapons system**

The budget request included \$86.1 million in Weapons Procurement, Navy (WPN) for the procurement of 19 and installation of eight Phalanx Block 1B close-in weapons systems (CIWS-1B). The Phalanx is a high rate of fire weapon that automatically acquires, tracks, and destroys aircraft and anti-ship cruise missiles that have penetrated all other ship defenses. The Phalanx is the most widely distributed ship self-defense weapon in the fleet. The CIWS-1B is an upgrade that uses thermal imaging and an automatic acquisition video tracker that provides the additional capability to engage small, high-speed, maneuvering surface craft and low, slow aircraft and helicopters. This upgrade is essential to provide a defense against potential terrorist and asymmetric threats as the fleet operates in the littorals. The committee recommends an increase of \$10.0 million in WPN to procure additional Phalanx CIWS-1B kits.

## **Navy and Marine Corps Ammunition**

### **Linear charges**

The budget request included \$10.3 million in Procurement of Ammunition, Navy and Marine Corps (PANMC), for linear charges, including the M59A1 linear demolition charge and the M584A4 high-explosive (HE) linear demolition charge. The committee notes that the budget request is a 34 percent reduction in funding for linear charges. As a result of this decrease, the M59A1 and M584A4 will only be procured at 46 percent and 38 percent, respectively, of Marine Corps munitions requirements. For this reason, the Commandant of the Marine Corps has identified funding for linear charges as an unfunded priority. The committee, therefore, recommends an increase of \$4.0 million in PANMC for linear charges as follows: \$2.0 million for the M59A1 linear demolition charge and \$2.0 million for the M584A4 HE linear demolition charge.

#### **40mm high-explosive, dual purpose cartridge**

The budget request included \$11.9 million in Procurement of Ammunition, Navy and Marine Corps (PANMC), for the 40mm high-explosive, dual purpose (HEDP) cartridge. The committee notes that the utility of the 40mm HEDP has proven important to mission effectiveness in ongoing contingency operations. The Commandant of the Marine Corps identified the 40mm HEDP as an unfunded requirement. The committee, therefore, recommends an increase of \$2.0 million in PANMC for the 40mm HEDP in support of the Marine Corps' total munitions requirement.

#### **60mm high-explosive cartridge**

The budget request included \$10.4 million in Procurement of Ammunition, Navy and Marine Corps (PANMC), for the 60mm high-explosive (HE) cartridge. The committee notes that the Marine Corps assesses the utility of the 60mm HE cartridge as high and states that the item is critical to the Marine Corps in ongoing contingency operations in Operation Iraqi Freedom and Operation Enduring Freedom. The committee, therefore, recommends an increase of \$2.5 million in PANMC for the 60mm HE cartridge in support of the Marine Corps' total munitions requirement.

#### **81mm illumination cartridge**

The budget request included \$19.4 million in Procurement of Ammunition, Navy and Marine Corps (PANMC), for the 81mm M853A1 illumination cartridge. This is approximately an \$800,000 reduction in funding for the program in fiscal year 2005. The committee notes that the Marine Corps has identified the M853A1 as critical to contingency operations in support of the global war on terrorism. Therefore, the committee recommends an increase of \$1.0 million in PANMC for the 81mm M853A1 illumination cartridge.

#### **Improved Light Anti-Armor Weapon**

The budget request included no funding for the M72 Improved Light Anti-armor Weapon (LAW). The committee notes that the M72 Improved LAW, which delivers increased lethality, range, accuracy, and reliability, has been identified by the Commandant of the Marine Corps as an unfunded priority, which requires \$2.0 million in fiscal year 2005 to meet acquisition objectives. The committee, therefore, recommends an increase of \$2.0 million in Procurement of Ammunition, Navy and Marine Corps, for the M72 Improved LAW.

#### **Shoulder launched, multi-purpose assault weapon**

The budget request included \$8.9 million in Procurement of Ammunition, Navy and Marine Corps (PANMC), for the shoulder launched, multi-purpose assault weapon (SMAW). The Commandant of the Marine Corps has identified the SMAW as an unfunded priority, with a requirement for procuring 5,523 rounds above the level funded in the budget request. The committee, therefore, recommends an increase of \$3.0 million in PANMC for SMAW procurement.

## **Shipbuilding**

### **Power unit assembly facility**

The budget request included no funding for the power unit assembly facility (PUAF). The PUAF will feature superior lighting, temperature and humidity control, and services that will significantly improve work performance on the propulsion plant for the new CVN-21 aircraft carrier. This new approach to pre-outfitting of power plant units prior to assembly onto the ship will enable an earlier fuel load, saving time and money. The Chief of Naval Operations has included the PUAF on his Unfunded Priority List. The committee recommends the establishment of a new budget line under Shipbuilding and Construction, Navy, for shipbuilding industrial facilities, and recommends an increase of \$15.0 million for the PUAF.

### **Other Procurement Navy**

#### **High performance metal fiber brushes for shipboard motors and generators**

The budget request included \$21.2 million in Other Procurement, Navy (OPN), for submarine support equipment, but included no funding for high performance metal fiber brushes for shipboard motors and generators. Metal fiber brushes have demonstrated the capability to significantly enhance performance and reduce maintenance costs on Navy motors and generators. The committee recommends an increase of \$5.0 million in OPN for the procurement of high performance metal fiber brushes.

#### **Machinery control surveillance systems**

The budget request included \$148.6 million in the Other Procurement, Navy (OPN), for "ship support equipment items under \$5 million."

The Navy has pursued a number of initiatives that would reduce manning and improve the situational awareness of crews during damage control operations. One area of emphasis has been systems that permit better monitoring of mission critical spaces such as engine rooms. The committee understands that environmentally certified video monitoring equipment would help meet this need.

The committee believes such equipment could aid the Navy's efforts to reduce the demands on the crews of existing ships. The committee recommends an increase of \$4.0 million in OPN for video monitoring equipment and installing that equipment in land-based test facilities and aboard combatants.

#### **SPQ-9B radar**

The budget request included \$3.6 million in Other Procurement, Navy (OPN), for installation of equipment and other tasks associated with the SPQ-9B radar, but included no funding for the procurement of additional equipment. The SPQ-9B radar solid state transmitter is designed to provide early and reliable detection of low flying, small radar cross section targets in natural and man-made clutter, while improving its capability to perform its original mission of anti-surface gunfire support. The committee rec-



ommends an increase of \$7.0 million in OPN for the procurement of the SPQ-9B radar solid state transmitter.

#### **Surface ship sonar domes**

The budget request included \$14.1 million in Other Procurement, Navy (OPN), for undersea warfare support equipment procurement, including \$3.6 million to purchase surface ship sonar domes.

The Navy needs to buy a number of new sonar domes every year to replace sonar domes damaged during normal operations. The existing replacement sonar domes depend on a subcontractor that intends to stop producing an essential material component at the end of the current contract. In light of this, the Navy had been developing a new design sonar dome based on newer composite materials.

The first sonar dome fabricated using these new composite materials failed the final external pressure test, largely due to insufficient understanding of some of the static pressures that the new material would face. The Navy and the contractor have since identified the manner in which the design must be modified to correct this problem.

The Navy needs additional funding to complete the redesign and fabricate a full-scale dome for at sea testing in order to qualify the new design. The committee recommends an increase of \$5.0 million in OPN for this purpose.

#### **Submarine high data rate antenna**

The budget request included \$94.5 million in Other Procurement, Navy (OPN), for submarine communications systems procurement, including \$22.4 million for submarine high data rate (HDR) antenna systems.

The submarine HDR antenna program provides submarines with antennas that have the bandwidth, gain, and flexibility to meet the stated fleet requirements for HDR communications in the super high frequency (SHF) and extremely high frequency (EHF) spectrums. In order for ships to participate fully in the Navy's new efforts to implement network centric warfare, ships must have higher data rate communications than are currently available on submarines. The Navy has decided to incorporate the HDR antennas on Trident strategic missile submarines (SSBNs) in order to replace older, less secure communications systems. The budget request would fund only one of these HDR upgrades for the SSBN fleet. The committee recommends an increase of \$19.0 million in OPN for one additional submarine HDR antenna system.

#### **Shipboard communications automation**

The budget request included \$11.9 million in Other Procurement, Navy (OPN), for shipboard communication automation procurement, but included no funding for shipboard communications upgrades.

Section 353 of the National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314) directed the Secretary of Defense to establish policy and procedures regarding installation and connection of telecommunications switches to the Defense Switched Network (DSN). The Navy is currently operating a number of ship-

board switches, in a number of different configurations, which were in the fleet before this language was enacted. These configurations have not been certified as secure and interoperable within the DSN. The committee believes the Navy should upgrade deployed systems to a DSN-certified configuration, and recommends an increase of \$3.0 million in OPN for this purpose.

#### **Joint threat emitter**

The budget request included \$44.6 million in Other Procurement, Navy (OPN), for weapons range support equipment, but included no funds for the joint threat emitter (JTE). The JTE is a high-power, high-fidelity emitter capable of replicating more than 1,500 threat signals, emulating the most advanced threat air defense systems. The JTE has been procured by the Air Force for its training. The committee recommends an increase of \$3.0 million in OPN for the procurement of the JTE to assess the potential for its use on Navy ranges.

#### **Integrated bridge system**

The budget request included \$57.5 million in Other Procurement, Navy (OPN), for AEGIS support equipment, but included no funding for the integrated bridge system. The integrated bridge system improves situational awareness through automation of navigation and ship control systems, enhancing ship safety while reducing crew workload. Installation of this system has helped the Navy to meet its electronic chart and display information requirement. The committee recommends an increase of \$9.0 million in OPN for the procurement and installation of integrated bridge systems on AEGIS surface combatants.

#### **NULKA anti-ship missile decoy system**

The budget request included \$46.6 million in Other Procurement, Navy (OPN), for anti-ship missile decoy systems, including \$16.7 million for procuring 36 NULKA decoys. Procuring additional NULKA decoys would ensure that fleet installations remain on schedule and would keep production rates above the minimum sustaining level. The committee recommends an increase of \$6.1 million in OPN for the procurement of additional NULKA decoys.

#### **Submarine training device modifications**

The budget request included \$39.4 million in Other Procurement, Navy (OPN), to procure submarine training device modifications. The Navy has critical training requirements to support submarines in the fleet and is beginning to use electronic performance support systems that would enhance training opportunities for deployed forces. The committee believes that the Navy could use these systems more extensively to provide on-the-job operation, maintenance and troubleshooting support, normally provided by journeymen and advanced schoolhouse training. Therefore, the committee recommends an increase of \$4.0 million in OPN to expand the use of performance support systems in conducting submarine training.

### **Serial number tracking system**

The budget request included \$11.5 million in Other Procurement, Navy (OPN), for other supply support equipment, but included no funding for the serial number tracking system (SNTS). The SNTS uses automatic information technology to store and retrieve specific maintenance and supply significant information concerning Navy repairable assets. The committee recommends an increase of \$8.0 million in OPN for the procurement of SNTS.

### **Man overboard indicator system**

The budget request included \$20.7 million in Other Procurement, Navy (OPN), for command support equipment, but included no funding to buy man overboard indicator (MOBI) systems, which are devices that sailors secure on their persons while aboard ship. The device would activate if the sailor fell overboard, allowing rescue forces to quickly respond. The committee believes the Navy should continue to procure MOBI systems, and recommends an increase of \$10.0 million in OPN for that purpose.

The committee understands that the Naval Safety Center has made recommendations to the Naval Sea Systems Command about deploying MOBI systems within the fleet. Because of the committee's interest in increasing protection for our deployed personnel, the committee directs the Secretary of the Navy to provide a report on the Safety Center's recommendations with the submission of the fiscal year 2006 budget request. That report should identify the Safety Center's recommendations, the number of deployed personnel that the Navy intends to outfit with MOBI systems, and the Navy's procurement plan within the Future Years Defense Program for funding its plan.

### **Protective covers for weapons systems**

The budget request included \$245.5 million in Other Procurement, Navy (OPN), to buy various spares and repair parts. Navy weapons systems are exposed to a very corrosive environment on a daily basis. This exposure leads to increased unit-level and depot-level maintenance requirements for these systems. The committee believes that the Navy should expand its efforts to provide protective covers for such weapons systems exposed to the elements aboard ship, thereby reducing maintenance costs and the demands on crew support. Therefore, the committee recommends an increase of \$2.0 million in OPN to procure protective covers for weapons systems.

## **Marine Corps Procurement**

### **Assault amphibious vehicle upgrades**

The budget request included \$58.6 million in Procurement, Marine Corps (PMC), for the Assault Amphibious Vehicle 7A1 (AAV7A1) Product Improvement Program, including \$49.9 million for the Assault Amphibious Vehicle Reliability, Availability, and Maintainability/Rebuild to Standard (AAV RAM/RS) effort. The AAV RAM/RS Program provides a replacement of both the engine and suspension of the AAV7A1 with U.S. Army Bradley Fighting Vehicle components modified for the AAV, which reduces oper-

ations and sustainment costs and increases Marine Corps' mechanized units mobility. The committee understands that the authorized procurement objective for the AAV RAM/RS is 754 platforms and that current and proposed funding covers 680 conversions. The committee notes that the Commandant of the Marine Corps has identified the AAV RAM/RS program in his Unfunded Priority List for fiscal year 2005. The committee recommends an increase of \$23.2 million in PMC for the upgrade of 37 additional AAV7A1s, for a total authorization of \$81.8 million.

#### **Squad automatic weapons**

The budget request included \$4.9 million in Procurement, Marine Corps (PMC), for weapons and combat vehicles, including \$1.4 million for the procurement of 447 M249 Squad Automatic Weapons (SAW), a critical weapon in the Marine rifle squad. The committee understands that the Marine Corps requires an additional 1,800 SAWs as a result of Operation Iraqi Freedom. The committee notes that the Commandant of the Marine Corps identified a fiscal year 2005 unfunded requirement to procure additional SAWs. The committee recommends an increase of \$5.8 million in PMC to procure an additional 1,800 SAWs, for a total authorization of \$10.7 million.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

#### **Javelin**

The budget request included no funding in Procurement, Marine Corps (PMC), for the Javelin missile, a shoulder-fired anti-armor weapon, which has proven to be very effective in Operation Enduring Freedom and Operation Iraqi Freedom. The committee believes that providing additional funding for this program will ensure this anti-armor capability is maintained by forward deployed Marine Corps units. The committee also notes that the Commandant of the Marine Corps has identified the Javelin missile on his Unfunded Priority List for fiscal year 2005. The committee recommends an increase of \$9.8 million in PMC, for 200 additional Javelin missiles, for a total authorization of \$9.8 million.

#### **Baseline combat operations center**

The budget request included \$35.9 million in Procurement, Marine Corps (PMC), for unit operations centers (UOC), but included no funding for baseline combat operations centers (COC). The committee understands that the baseline COC provides Marine operational forces with interoperable command and control capabilities whenever and wherever they operate or fight. The committee believes that the Marine Corps would benefit from employing a common developmental platform for integrating the UOC with a common aviation command and control system. The committee recommends an increase of \$2.0 million in PMC, for baseline combat operations centers, for a total authorization of \$37.9 million.

**High frequency manpack radio**

The budget request included \$26.0 million in Procurement, Marine Corps (PMC), for legacy radios required until the fielding of the Joint Tactical Radio System (JTRS). The request included \$12.4 million for 602 AN/PRC-150(C) high frequency manpack radios, which became the Marine Corps' primary beyond line-of-sight communications path during Operation Enduring Freedom. The committee notes that the Marine Corps identified an additional requirement for AN/PRC-150(C) radios as part of the Marine Corps migration to JTRS and to reduce the inventory of failing AN/PRC-104 radios. The committee also notes that the Commandant of the Marine Corps identified a fiscal year 2005 unfunded requirement to procure additional AN/PRC-150(C) radios. The committee recommends an increase of \$14.2 million in PMC, to procure an additional 602 AN/PRC-150(C) radios, for a total authorization of \$40.2 million.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

**Night vision equipment**

The budget request included \$26.1 million in Procurement, Marine Corps (PMC), for night vision devices, including \$3.7 million for the procurement of 1,025 AN/PVS-14 and \$2.1 million for the procurement of 422 AN/PVS-17 night vision devices, combat-proven systems, which increase the combat warfighting capability of Marine operating forces. The committee understands that the Marine Corps requires an additional 1,606 AN/PVS-14 night vision devices to complete a warfighting requirement for current operations, and an additional 845 AN/PVS-17 miniature night vision devices to complete the Marine Corps acquisition objective. The committee notes that the Commandant of the Marine Corps identified a fiscal year 2005 unfunded requirement to procure additional AN/PVS-14 and AN/PVS-17 night vision devices. The committee recommends an increase of \$5.8 million to procure an additional 1,606 AN/PVS-14 night vision devices and \$4.1 million to procure an additional 845 AN/PVS-17 night vision devices, for a total authorization of \$36.0 million in PMC.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

**Lightweight multiband satellite terminal**

The budget request included \$14.5 million in Procurement, Marine Corps (PMC), for radio systems, including \$5.2 million for the lightweight multiband satellite terminal (LMST). The LMST upgrades existing Marine Corps satellite radios to extend their useful life and to provide the Marine Corps commander with greater access to a wide range of commercial and military satellites. The committee understands that Marine Corps requirements for the LMST have increased to 52 terminals based on requirements identified by the Marine Corps Satellite Communications/Global Infor-

mation Network architecture. The committee notes that the Commandant of the Marine Corps has identified the LMST on its Unfunded Priority List for fiscal year 2005. The committee recommends an increase of \$12.0 million in PMC, for three additional lightweight multiband radio systems, for a total authorization of \$26.5 million for LMST.

#### **Communication emitter sensing and attacking system**

The budget request included \$1.0 million in Procurement, Marine Corps (PMC), for the procurement of the Communication Emitter Sensing and Attacking System (CESAS) and \$268.6 million in PE 26313M for Marine Corps communications systems, including \$1.2 million for CESAS development. CESAS will provide the Marine Corps commander with the capability of sensing and denying the enemy the use of the electromagnetic spectrum thereby disrupting enemy command and control processes. The committee notes that the CESAS system has no capability to defeat enemy remotely controlled improvised explosive devices (RCIED). However, the Marine Corps believes that additional funding would allow for sufficient research and risk mitigation for the installation of counter RCIED sub-systems using techniques already proven in fielded Marine Corps systems. The committee notes that the Commandant of the Marine Corps identified a fiscal year 2005 unfunded requirement to develop and procure CESAS equipment necessary to protect against RCIEDs. The committee recommends an additional \$13.0 million in PMC, for a total authorization of \$14.0 million, and \$3.8 million in PE 26313M, for a total authorization of \$272.4 million, for the development and procurement of CESAS equipment.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

#### **Handheld standoff mine detection system**

The budget request included \$3.4 million in Procurement, Marine Corps (PMC), for 150 AN/PSS-14 handheld standoff mine detection systems. The Marine Corps procured 72 mine detectors to support the 1st Marine Expeditionary Force's urgent requirements in Iraq for countermine/Improvised Explosive Device (IED) counter measures. The committee believes this essential IED detection device should be provided to the Marine Corps as soon as possible. The committee recommends an increase of \$7.4 million in PMC, for 192 additional AN/PSS-14 mine detectors, for a total authorization of \$10.8 million.

#### **Combat casualty care equipment**

The budget request included \$6.0 million in Procurement, Marine Corps (PMC), for field medical equipment, but no funding for combat casualty care equipment. The committee understands that the Marine Corps has a requirement to upgrade obsolete medical equipment, including rapid intravenous (IV) infusion pumps, to provide first-echelon care for sick or injured marines and to increase their survivability. The committee recommends an increase of \$3.5 million in PMC for 230 combat casualty care sets, and \$4.0

million for rapid intravenous (IV) infusion pumps, for a total authorization of \$13.5 million.

**Subtitle D—Air Force Programs**

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Cost</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Aircraft Procurement, Air Force</b>						
		<b>Combat Aircraft</b>						
		<b>Tactical Forces</b>						
3010	1	F-22 RAPTOR	24	4,128,356	-2	-280,200	22	3,848,156
		Production deliveries behind schedule			[-2]	[-280,200]		
3010	1	LESS: ADVANCE PROCUREMENT (PY)		-494,587				-494,587
3010	2	ADVANCE PROCUREMENT (CY)		523,187				523,187
		<b>Airlift Aircraft</b>						
		<b>Tactical Airlift</b>						
3010	3	C-17A (MYP)	14	2,941,532			14	2,941,532
3010	3	LESS: ADVANCE PROCUREMENT (PY)		-429,053				-429,053
3010	4	ADVANCE PROCUREMENT (CY)		381,800				381,800
3010	5	C-17 ICS		945,560				945,560
		<b>Other Airlift</b>						
3010	6	C-130H						
3010	7	C-130J	11	902,421		36,700	11	939,121
		C-130J (transfer from APAF, line 8)				[36,700]		
3010	7	LESS: ADVANCE PROCUREMENT (PY)		-169,916				-169,916
3010	8	ADVANCE PROCUREMENT (CY)		186,666		-36,700		149,966
		C-130J (transfer to APAF, line 7)				[-36,700]		
		<b>Trainer Aircraft</b>						
		<b>Operational Trainers</b>						
3010	9	JPATS	53	307,072			53	307,072



# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Other Aircraft</b>						
		<b>Helicopters</b>						
3010	10	V-22 OSPREY	3	320,619			3	320,619
3010	10	LESS: ADVANCE PROCUREMENT (PY)		-15,038				-15,038
3010	11	ADVANCE PROCUREMENT (CY)		11,035				11,035
3010	12	<b>Mission Support Aircraft</b>						
		CIVIL AIR PATROL A/C	27	2,271			27	2,271
3010	13	<b>Other Aircraft</b>						
		TARGET DRONES		74,143				74,143
3010	14	C-40 ANG						
3010	15	EC130J						
3010	16	E-8C						
3010	16	LESS: ADVANCE PROCUREMENT (PY)						
3010	17	HAEUAV	4	342,360			4	342,360
3010	17	LESS: ADVANCE PROCUREMENT (PY)		-54,592				-54,592
3010	18	ADVANCE PROCUREMENT (CY)		71,863				71,863
3010	19	PREDATOR UAV	9	146,609			9	146,609
3010	20	SMALL UAV'S						
		<b>Modification of In-service Aircraft</b>						
		<b>Strategic Aircraft</b>						
3010	21	B-2A		96,002				96,002
3010	22	B-1B		8,825				8,825
3010	23	B-52		92,216				92,216
3010	24	F-117		13,223				13,223

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Tactical Aircraft</b>						
3010	25	A-10		53,362		16,000		69,362
		Litening air targeting pod				[16,000]		
3010	26	F-15		181,602		35,800		217,402
		IFF modernization				[5,800]		
		F100-PW-220E engines				[30,000]		
3010	27	F-16		336,289		47,000		383,289
		Block 42 engine upgrade				[30,000]		
		Litening air targeting pod				[17,000]		
3010	28	F22 RAPTOR		70,087				70,087
3010	29	T/AT-37		78				78
		<b>Airlift Aircraft</b>						
3010	30	C-5		99,601		30,000		129,601
		C-5 AMP				[30,000]		
3010	31	C-9						
3010	32	C-17A		89,144				89,144
3010	33	C-21		1,409				1,409
3010	34	C-32A		187				187
3010	35	C-37A		351				351
3010	36	C-141						
		<b>Trainer Aircraft</b>						
3010	37	T-6		3,850				3,850
3010	38	T-38		153,677				153,677
3010	39	T-41 AIRCRAFT		89				89
3010	40	T-43		599				599
		<b>Other Aircraft</b>						
3010	41	KC-10A (ATCA)		37,314				37,314

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
3010	42	C-12		19,373				19,373
3010	43	C-18						
3010	44	C-20 MODS		449				449
3010	45	VC-25A MOD		28,031				28,031
3010	46	C-40		187				187
3010	47	C-130		110,375				118,275
		Scathe Chief						
3010	48	C130J MODS		36,921				36,921
3010	49	C-135		51,905				61,905
		GATM for KC-135						
3010	50	C-29A MODS		15,953				15,953
3010	51	DARP		101,233				101,233
3010	52	E-3		36,025				36,025
3010	53	E-4		101,818				101,818
3010	54	E-8		45,302				45,302
3010	55	H-1		6,575				6,575
3010	56	H-60		95,068				95,068
3010	57	OTHER AIRCRAFT		76,701				76,701
3010	58	PREDATOR MODS		31,872				31,872
3010	59	CV-22 MODS		275				275
		Other Modifications						
3010	60	CLASSIFIED PROJECTS		20,880				20,880
		Aircraft Spares and Repair Parts						
3010	61	INITIAL SPARES/REPAIR PARTS		234,103				234,103

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Aircraft Support Equipment and Facilities</b>						
		<b>Common Support Equip</b>						
3010	62	COMMON SUPPORT EQUIPMENT		223,600		4,000		227,600
		<b>Aircraft de-icers</b>						
		<b>Post Production Support</b>						
3010	63	B-1		11,733				11,733
3010	64	B-2A		6,801				6,801
3010	65	B-2A		30,683				30,683
3010	66	B-52		19,405				19,405
3010	67	C-130		1,229				1,229
3010	68	F-15		13,407				13,407
3010	69	F-16		11,531				11,531
		<b>Industrial Preparedness</b>						
3010	70	INDUSTRIAL RESPONSIVENESS		21,082				21,082
		<b>War Consumables</b>						
3010	71	WAR CONSUMABLES		41,314				41,314
		<b>Other Production Charges</b>						
3010	72	OTHER PRODUCTION CHARGES		309,725				309,725
3010	73	DEPOT MODERNIZATION		34,464				34,464
		<b>Classified Pgms</b>						
3010	74	CLASSIFIED PROGRAMS						
		<b>Common ECM Equip</b>						
3010	75	COMMON ECM EQUIPMENT						
		<b>Other Production Charges SOF</b>						
3010	76	CANCELED ACCT ADJUSTMENTS						

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Cost</u>	<u>Authorized</u>	<u>Cost</u>
		DARP						
3010	77	DARP		64,941				64,941
		<b>Total - Aircraft Procurement, Air Force</b>		<b>13,163,174</b>		<b>-129,500</b>		<b>13,033,674</b>
		<b>Procurement of Ammunition, Air Force</b>						
		<b>Procurement of Ammo, Air Force</b>						
		<b>Rockets</b>						
3011	1	ROCKETS		34,557				34,557
		<b>Cartridges</b>						
3011	2	CARTRIDGES		149,100				149,100
		<b>Bombs</b>						
3011	3	PRACTICE BOMBS		46,918				46,918
3011	4	GENERAL PURPOSE BOMBS		266,489				266,489
3011	5	SENSOR FUZED WEAPON	315	117,023			315	117,023
3011	6	JOINT DIRECT ATTACK MUNITION	23,137	521,782			23,137	521,782
3011	7	WIND CORRECTED MUNITIONS DISP	2,507	58,670			2,507	58,670
		<b>Flare, IR MJU-7B</b>						
3011	8	CAD/PAD		20,379				20,379
3011	9	EXPLOSIVE ORDNANCE DISPOSAL		2,889				2,889
3011	10	SPARES AND REPAIR PARTS		179				179
3011	11	REPLENISHMENT SPARES		4,185				4,185
3011	12	MODIFICATIONS <5M		202				202
3011	13	ITEMS LESS THAN \$5,000,000		2,798				2,798

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Cost</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Fuzes</b>						
3011	14	FLARES		123,830		123,830		123,830
3011	15	FUZES		36,507		36,507		36,507
		<b>Weapons</b>						
		<b>Small Arms</b>						
3011	16	SMALL ARMS		10,949		10,949		10,949
		<b>Total - Procurement of Ammunition, Air Force</b>		<b>1,396,457</b>		<b>1,396,457</b>		<b>1,396,457</b>
		<b>Missile Procurement, Air Force</b>						
		<b>Ballistic Missiles</b>						
		<b>Missile Replacement Equipment-Ballistic</b>						
3020	1	LGM-30F/G MINUTEMAN II/III		30,143		30,143		30,143
3020	2	PEACEKEEPER (M-X)						
		<b>Other Missiles</b>						
		<b>Tactical</b>						
3020	3	JASSM	360	148,161		148,161	360	148,161
3020	4	JOINT STANDOFF WEAPON						
3020	5	SIDEWINDER (AIM-9X)	248	52,595		52,595	248	52,595
3020	6	AMRAAM	202	107,354		107,354	202	107,354
3020	7	PREDATOR HELLFIRE MISSILE	235	20,017		20,017	235	20,017
3020	8	SMALL DIAMETER BOMB	158	29,257		29,257	158	29,257
		<b>Industrial Facilities</b>						
3020	9	INDUSTRIAL PREPAREDNESS/POL PREVENTION		2,084		2,084		2,084

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Request	Cost	Qty	Change	Cost	Qty	Authorized	Cost
		Modification of In-service Missiles									
		Class IV									
3020	10	ADVANCED CRUISE MISSILE			4,094						4,094
3020	11	LGM-30F/G MINUTEMAN II/III									
3020	12	MM III MODIFICATIONS			640,760						640,760
3020	13	AGM-65D MAVERICK			222						222
3020	14	AIR LAUNCH CRUISE MISSILE			21,154						21,154
3020	15	PEACEKEEPER (M-X)									
		Spares and Repair Parts									
		Other Aircraft									
3020	16	ADVANCED CRUISE MISSILE			8,020						8,020
3020	17	AIM-7E SPARROW			1,898						1,898
3020	18	AIM-9 SIDEWINDER			6,273						6,273
3020	19	SIDEWINDER (AIM-9X)			1,759						1,759
3020	20	AGM-130 POWERED GBU-15			368						368
3020	21	LGM-30F/G MINUTEMAN II/III			10,016						10,016
3020	22	MM III MODIFICATIONS			12,866						12,866
3020	23	AGM-65D MAVERICK			1,423						1,423
3020	24	AGM-88A HARM			2,868						2,868
3020	25	AIR LAUNCH CRUISE MISSILE			4,609						4,609
3020	26	AMRAAM			341						341
3020	27	PEACEKEEPER (M-X)			11,669						11,669
		Other Support									
		Space Programs									
3020	28	ADVANCED EHF			98,590			35,000			133,590
		Advanced EHF spare parts and long lead items						[35,000]			

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Cost	Request	Qty	Change	Cost	Qty	Authorized	Cost
3020	29	WIDEBAND GAPFILLER SATELLITES		40,307				15,000			55,307
		Wideband gapfiller satellite						[15,000]			
3020	29	LESS: ADVANCE PROCUREMENT (PY)		9,250							9,250
3020	30	SPACEBORNE EQUIP (COMSEC)		332,763					3		332,763
3020	31	GLOBAL POSITIONING (SPACE)	3	-31,991							-31,991
3020	31	LESS: ADVANCE PROCUREMENT (PY)		29,758							29,758
3020	32	ADVANCE PROCUREMENT (CY)		74,201							74,201
3020	33	DEF METEOROLOGICAL SAT PROG(S)		116,468							116,468
3020	34	DEFENSE SUPPORT PROGRAM(SPACE)		6,613							6,613
3020	35	DEFENSE SATELLITE COMM SYSTEM		74,290				-27,700			46,590
3020	36	TITAN SPACE BOOSTERS(SPACE)						[-27,700]			
		Titan excess funds						-100,000	3		510,997
3020	37	EVOLVED EXPENDABLE LAUNCH VEH	3	610,997				[-100,000]			
		EELV launch delay						[-100,000]			
3020	38	MEDIUM LAUNCH VEHICLE(SPACE)		102,872				-5,000			97,872
		MLV excess rate growth						[-5,000]			
		Special Programs									
3020	39	CANCELLED ACCOUNT		332,388							332,388
3020	40	DEFENSE SPACE RECONN PROGRAM	[ ]	[ ]							
3020	41	SPECIAL PROGRAMS	[ ]	[ ]							
3020	42	SPECIAL ACTIVITIES	[ ]	[ ]							
3020	43	CLASSIFIED PROGRAMS	[ ]	[ ]							
3020	44	SPECIAL UPDATE PROGRAMS		130,809							130,809
3020	999	CLASSIFIED PROGRAMS		1,673,047							1,673,047
		Total - Missile Procurement, Air Force		4,718,313				-82,700			4,635,613



## (Dollars in Thousands)

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**Title I - Procurement**  
(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Request	Change	Authorized	Cost
3080	22	HMWV, UP-ARMORED		6,953				6,953
3080	23	TRACTOR, A/C TOW, MB-2						
3080	24	TRACTOR, A/C TOW, MB-4						
3080	25	TRACTOR, TOW, FLIGHTLINE		11,127				11,127
3080	26	TRUCK HYDRANT FUEL		6,820				6,820
3080	27	ITEMS LESS THAN \$5,000,000		45				45
		<b>Fire Fighting Equipment</b>		38,839				38,839
3080	28	TRUCK CRASH P-19		16,158				16,158
3080	29	ITEMS LESS THAN \$5,000,000		8,372				8,372
		<b>Materials Handling Equipment</b>						
3080	30	TRUCK, F/L 6000 LB		7,408				7,408
3080	31	TRUCK, F/L 10,000 LB		18,588				18,588
3080	32	TUNNER LOADER						
3080	33	HALVERSEN LOADER						
		Halvorsen loaders						
3080	34	ITEMS LESS THAN \$5,000,000		18,184				18,184
		<b>Base Maintenance Support</b>						
3080	35	LOADER, SCOOP		9,414				9,414
3080	36	LOADER, SCOOP, W/BACKHOE		4,202				4,202
3080	37	TRUCK, DUMP		10,609				10,609
3080	38	RUNWAY SNOW REMOVAL & CLEANING		22,589				22,589
3080	39	CRANE, 7-50 TON		5,827				5,827
3080	40	MODIFICATIONS		4,474				4,474
3080	41	ITEMS LESS THAN \$5,000,000		34,013				34,013
		<b>Cancelled Account Adjustment</b>						
3080	42	CANCELLED ACCOUNT ADJUSTMENT						
3080	43	JUDGEMENT FUND						

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Electronics and Telecommunications</b>						
		<b>Comm Security Equipment (COMSEC)</b>						
3080	44	COMSEC EQUIPMENT		46,867				46,867
3080	45	MODIFICATIONS (COMSEC)		462				462
3080	46	<b>Intelligence Programs</b>						
3080	47	INTELLIGENCE TRAINING EQUIPMENT		2,902				2,902
		INTELLIGENCE COMM EQUIP		1,695				1,695
3080	48	<b>Electronics Programs</b>						
3080	49	AIR TRAFFIC CTRL/LAND SYS (AT		2,949				2,949
3080	50	NATIONAL AIRSPACE SYSTEM		44,354				44,354
3080	51	THEATER AIR CONTROL SYS IMPRO		67,471				67,471
3080	52	WEATHER OBSERVE/FORECAST		32,366				32,366
3080	53	STRATEGIC COMMAND AND CONTROL		49,300				49,300
3080	54	CHEYENNE MOUNTAIN COMPLEX		17,672				17,672
3080	55	TAC SIGINT SUPPORT		386				386
		DRUG INTERDICTION PROGRAM		404				404
3080	56	<b>Special Comm-Electronics Projects</b>						
3080	57	GENERAL INFORMATION TECHNOLOGY		99,862				99,862
3080	58	AF GLOBAL COMMAND & CONTROL S		17,324				17,324
3080	59	MOBILITY COMMAND AND CONTROL		8,982				8,982
3080	60	AIR FORCE PHYSICAL SECURITY S		93,750				93,750
3080	61	COMBAT TRAINING RANGES		38,142				38,142
3080	62	MINIMUM ESSENTIAL EMERGENCY C						
3080	63	C3 COUNTERMEASURES		11,812				11,812
3080	64	GCSS-AF FOS		18,614				18,614
3080	65	THEATER BATTLE MGT C2 SYS		44,669				44,669
3080		AIR OPERATIONS CENTER (AOC)		43,269				43,269

# **Title I - Procurement** (Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Request	Change	Authorized	Cost
		<b>Air Force Communications</b>						
3080	66	BASE INFORMATION INFRASTRUCTURE		423,972				423,972
3080	67	USCENTCOM		30,430				30,430
3080	68	DEFENSE MESSAGE SYSTEM (DMS)		8,297				8,297
		<b>DISA Programs</b>						
3080	69	SPACE BASED IR SENSOR PROG SP						
3080	70	NAVSTAR GPS SPACE		10,272				10,272
3080	71	NUDET DETECTION SYS (NDS) SPA		7,554				7,554
3080	72	AF SATELLITE CONTROL NETWORK		43,882				43,882
3080	73	SPACELIFT RANGE SYSTEM SPACE		101,458				101,458
3080	74	MILSATCOM SPACE		19,176				19,176
3080	75	SPACE MODS SPACE		16,346				16,346
		<b>Organization and Base</b>						
3080	76	TACTICAL C-E EQUIPMENT		141,883				141,883
3080	77	COMBAT SURVIVOR EVADER LOCATE		13,936				13,936
3080	78	RADIO EQUIPMENT		8,777				8,777
3080	79	TV EQUIPMENT (AFRTV)		5,112				5,112
3080	80	CCTV/AUDIOVISUAL EQUIPMENT		3,271				3,271
3080	81	BASE COMM INFRASTRUCTURE		118,935				118,935
3080	82	ITEMS LESS THAN \$5,000,000		5,948				5,948
		<b>Modifications</b>						
3080	83	COMM ELECT MODS		23,400				23,400
		<b>Other Base Maintenance and Support Equipment</b>						
		<b>Test Equipment</b>						
3080	84	BASE/ALC CALIBRATION PACKAGE		15,306				15,306
3080	85	PRIMARY STANDARDS LABORATORY		1,107				1,107
3080	86	ITEMS LESS THAN \$5,000,000		7,607				7,607

# **Title I - Procurement**

(Dollars in Thousands)

Account	Line	Program Title	FY 2005		Senate		Senate	
			Qty	Cost	Qty	Cost	Change	Authorized
		<b>Personal Safety and Rescue Equipment</b>						
3080	87	NIGHT VISION GOGGLES		17,349				17,349
3080	88	ITEMS LESS THAN \$5,000,000		12,997				25,797
		ACES II ejection seat leg restraint kits				12,800		
		Aircrew survival radio test sets				[6,000]		
		Fixed aircrew standardized seats				[4,000]		
						[2,800]		
		<b>Depot Plant and Material Handling Equipment</b>						
3080	89	MECHANIZED MATERIAL HANDLING		16,155		6,000		22,155
		Point of Maintenance Initiative				[6,000]		
3080	90	ITEMS LESS THAN \$5,000,000		6,503				6,503
		<b>Electrical Equipment</b>						
3080	91	FLOODLIGHTS		5,882				5,882
3080	92	ITEMS LESS THAN \$5,000,000		9,876				9,876
		<b>Base Support Equipment</b>						
3080	93	BASE PROCURED EQUIPMENT		8,401		3,000		11,401
		Combat Arms Training System				[3,000]		
3080	94	MEDICAL/DENTAL EQUIPMENT		14,019				14,019
3080	95	ENVIRONMENTAL PROJECTS						
3080	96	AIR BASE OPERABILITY		5,432				5,432
3080	97	PHOTOGRAPHIC EQUIPMENT		1,424				1,424
3080	98	PRODUCTIVITY ENHANCING CAPITA		5,475				5,475
3080	99	MOBILITY EQUIPMENT		320,116				320,116
3080	100	AIR CONDITIONERS		1,452				1,452
3080	101	ITEMS LESS THAN \$5,000,000		18,811				18,811
		<b>Special Support Projects</b>						
3080	102	PRODUCTION ACTIVITIES		[ ]				
3080	103	TECH SURV COUNTERMEASURES EQ		4,034				4,034

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
3080	104	DARP RC135		18,726				18,726
3080	105	DARP, MRIGS		320,218				320,218
3080	106	SELECTED ACTIVITIES	[ ]					
3080	107	SPECIAL UPDATE PROGRAM		224,988				224,988
3080	108	DEFENSE SPACE RECONNAISSANCE		14,264				14,264
3080	109	MODIFICATIONS		195				195
3080	110	FIRST DESTINATION TRANSPORTATION		5,767				5,767
		<b>Spares and Repair Parts</b>						
3080	111	SPARES AND REPAIR PARTS		41,097				41,097
3080	112	REPLENISHMENT SPARES		297				297
3080	999	CLASSIFIED PROGRAMS		10,195,797				10,195,797
		Financial information systems						
						-13,500		-13,500
		<b>Total - Other Procurement, Air Force</b>		<b>13,283,557</b>		<b>14,700</b>		<b>13,298,157</b>

### **Restriction on retirement of KC-135E aircraft (sec. 131)**

The committee recommends a provision that would prohibit the Secretary of the Air Force from retiring any KC-135E aerial refueling aircraft in fiscal year 2005.

Section 134(b) of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) required that an analysis of alternatives (AOA) on meeting aerial refueling requirements be conducted and delivered to the congressional defense committees by March 1, 2004. In a letter to the congressional defense committees on February 24, 2004, the Acting Under Secretary of Defense for Acquisition, Technology, and Logistics provided the guidance that will be used for the conduct of the AOA. On February 27, 2004, the Secretary of the Air Force sent a letter to the committee stating that the AOA would be completed in fiscal year 2005.

The budget request included a plan to retire 41 KC-135Es in fiscal year 2005. The rationale for prohibiting KC-135E retirements in fiscal year 2005 is that there is a distinct possibility that the AOA may recommend retention and modernization of the KC-135E aircraft. There is no clear path forward on the lease or purchase of KC-767 aircraft that was authorized by section 135 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136). Air Force briefings indicate that KC-135R and KC-135E mission capable rates for fiscal year 2003 were 82 percent and 75 percent, respectively. These mission capable rates demonstrate that these aircraft are performing their mission, and are valuable assets for both mobility, homeland defense, and in-theater operations. The committee believes that it is not prudent to retire any of KC-135E aircraft until the AOA is completed and there is a clear path forward for the recapitalization and modernization of the aerial refueling fleet.

This provision is not intended to prevent the Air Force from placing a KC-135E aircraft into the Backup Air Inventory (BAI) category if that aircraft is deemed unsafe to fly by competent technical authority.

### **Prohibition on retirement of F-117 aircraft (sec. 132)**

The committee recommends a provision that would prohibit the Air Force from retiring any F-117 aircraft in fiscal year 2005. The budget request included a proposal to retire 10 F-117 aircraft. The F-117 remains the only stealthy tactical aircraft capable of delivering certain precision munitions currently in the inventory. Already, the F/A-22 has the ability to operate around-the-clock at supercruise, and will eventually be able to perform the mission of the F-117 with enhanced effectiveness, though the operational testing of the F/A-22 is just commencing. The committee believes it is premature to retire F-117 aircraft at this time.

## **Other Air Force Programs**

### **Air Force Aircraft**

#### **F/A-22 aircraft**

The budget request included \$3.6 billion in Aircraft Procurement, Air Force (APAF), for the procurement of 24 F/A-22 Raptor air-

craft. During the committee's deliberations on the fiscal year 2004 budget request, the F/A-22 was continuing in low rate initial production. The Air Force plan, at that time, was that the F/A-22 dedicated initial operational test and evaluation (DIOT&E) would commence in October 2003, a delay from August 2003, due to software instability problems. The production of aircraft was behind the contractual delivery dates by eight months and eight aircraft. The Air Force presented a production forecast that predicted that F/A-22 production would catch up to contractually required deliveries by June 2004.

Section 133 of the National Defense Authorization Act for Fiscal Year 2004 required that certain F/A-22s designated to participate in DIOT&E be certified as having achieved five hours mean time between avionics anomalies before the tests commenced.

DIOT&E for the F/A-22 aircraft has just commenced, six months later than the forecast presented last year. The committee understands that a defense acquisition board has reviewed the readiness of the aircraft to commence this test phase, and that the required software stability has been demonstrated.

Production of F/A-22 aircraft has significantly improved, paralleling the increased ramp rates established in the contract. This improvement has done little, however, to address the backlog in contract deliveries that existed last year. Deliveries of F/A-22s are now seven aircraft and at least six months behind schedule. The Air Force has delivered a new schedule to the committee showing that production deliveries for F/A-22 aircraft will catch up to the contract requirements in December 2004, six months later than the forecast presented last year. This schedule is the fourth updated production schedule delivered to the committee in as many years.

The committee supports the F/A-22 program. Air dominance is essential to enable ground maneuver. There are increasing numbers of potential threat aircraft in the world that are known to have performance advantages over legacy U.S. fighters, which were designed in the 1970s. The F/A-22 is necessary to engage not only these advanced fighters, but to provide the capability to destroy advanced surface-to-air threats.

While the committee supports the F/A-22 program, the committee remains concerned that deliveries of F/A-22 aircraft remain well behind the contractual schedule, and that production decisions are still being made prior to DIOT&E. To ease the production backlog, while maintaining the production rate at that established for the fiscal year 2004 contract, the committee recommends a decrease in APAF of \$280.2 million, for a total authorization of \$3.4 billion for the procurement of at least 22 F/A-22 aircraft in fiscal year 2005. The committee is aware that the Department of Defense has approved the F/A-22 program as a "buy to budget" program. If the authorized level of funding is sufficient to procure more than 22 aircraft, the Air Force may do so after the Secretary of the Air Force provides a letter to the Committees on Armed Services of the Senate and the House of Representatives certifying that the contractor is delivering aircraft within the contractual delivery schedule, and that the program is fully funded to include initial spares, logistics, and training requirements.



### **C-130J aircraft**

The budget request included \$732.5 million in Aircraft Procurement, Air Force (APAF), for the procurement of 11 C-130J aircraft. The Air Force has informed the committee that this amount should be increased by \$36.7 million with an identical decrease in C-130J advance procurement to make the program executable. Therefore, the committee recommends an increase of \$36.7 million in APAF, line 7, for a total authorization of \$769.2 million for procurement of C-130J aircraft.

### **C-130J aircraft advance procurement**

The budget request included \$186.7 million in Aircraft Procurement, Air Force (APAF), for advance procurement of the C-130J aircraft. The Air Force has informed the committee that this amount should be decreased by \$36.7 million with an identical increase in C-130J aircraft procurement to make the program executable. Therefore, the committee recommends a decrease of \$36.7 million in APAF, line 8, for a total authorization of \$150.0 million for C-130J advance procurement.

### **A-10 aircraft targeting pods**

The budget request included \$53.4 million in Aircraft Procurement, Air Force (APAF), for modifications to the A-10 aircraft, including \$45.7 million to incorporate precision engagement capabilities in the aircraft. The Air Force has decided to keep the A-10 aircraft in the inventory until 2028, and plans are in place to fully integrate targeting pods data-links and joint weapons to enable the aircraft to perform on the digital battlefield. The precision engagement modifications in the budget request include targeting pod integration, but do not include any Litening advanced targeting (AT) pods. The committee recommends an increase in APAF of \$16.0 million for the procurement of Litening AT pods for the A-10 aircraft.

### **F-15 aircraft modifications**

The budget request included \$181.6 million in Aircraft Procurement, Air Force (APAF), for modifications to the F-15 aircraft, including \$1.7 million for certain items related to upgrading F-15 engines to the F100-PW-220E configuration, and \$37.9 million to replace F-15A-D aircraft identification-friend-or-foe (IFF) equipment.

The F100-PW-220E eliminates known engine obsolescence issues, improves supportability, and increases engine thrust. The committee recommends an increase of \$30.0 million in APAF for additional F-15 engine upgrades to the F100-PW-220E configuration.

The current F-15 IFF suffers from low mean time between failure, parts obsolescence, reduced identification capability, and lack of compliance with the global air traffic management system. These problems can be resolved with a readily available replacement system. Procurement of a modern IFF is included on the Air Force Chief of Staff's Unfunded Priority List. The committee recommends an increase of \$5.8 million in APAF to update the IFF systems for active and reserve component F-15A-D aircraft, for a total authorization of \$217.4 million for F-15 aircraft modifications.

### **F-16 aircraft modifications**

The budget request included \$336.3 million in Aircraft Procurement, Air Force (APAF), for modifications to the F-16 aircraft, but included no funding for the procurement and installation of F100-PW-229 engines for block 42 F-16 aircraft or for the procurement of Litening Advanced Targeting (AT) pods.

The F100-PW-229 engine provides thrust and performance similar to that in block 40 and block 50/52 F-16 aircraft. The committee recommends an increase of \$30.0 million in APAF for the procurement of F100-PW-229 engines for block 42 F-16 aircraft.

The Litening AT pod has an improved forward-looking infrared sensor which provides greater performance and improved reliability, and enables the F-16 to deliver precision-guided munitions. The committee recommends an increase of \$17.0 million in APAF for the procurement of Litening AT pods for F-16 aircraft, for a total authorization of \$383.3 million for F-16 aircraft modifications.

### **C-5 aircraft avionics modernization program**

The budget request included \$99.6 million in Aircraft Procurement, Air Force (APAF), for C-5 aircraft modifications, including \$89.7 million for the avionics modernization program (AMP). The AMP modification consists of a newly designed avionics suite which will comply with the global air traffic management system and safety upgrades, such as the traffic alert and collision avoidance system and the terrain awareness and warning system. The committee recommends an increase of \$30.0 million in APAF for C-5 AMP.

### **C-130 aircraft modifications**

The budget request included \$110.4 million in Aircraft Procurement, Air Force (APAF), for modifications to the C-130 aircraft, but did not include any funding for the Scathe Chief initiative to integrate with the C-130H Scathe View aircraft. The existing aircraft provides reach-back communications to Combatant Commanders through satellite communications, with situational awareness and near real-time snap-shot imagery of the battlefield using forward-looking infrared, daylight television, spotter scope, and laser rangefinder. The Scathe Chief initiative would add a wide-band data link system to the C-130H Scathe View aircraft to provide reach-back and reach-forward communications. The committee recommends an increase of \$7.9 million in APAF for the Scathe Chief program.

### **KC-135 aircraft global air traffic management**

The budget request included \$51.9 million in Aircraft Procurement, Air Force (APAF), for modifications to C-135 and KC-135 aircraft, including \$45.9 million for global air traffic management (GATM) modifications. The GATM modification includes avionics upgrades, wiring interfaces and associated preparation activities for added communications, navigation, and surveillance equipment needed for operation in oceanic airspace where there are reduced spacing requirements between aircraft. The committee recommends an increase in APAF of \$10.0 million for additional KC-135 GATM modifications.

### **Aircraft de-icers**

The budget request included \$223.6 million in Aircraft Procurement, Air Force (APAF), for common support equipment. Funding was included for the purchase of only five GL-1800AP truck mounted aircraft de-icers, while 44 were procured in fiscal year 2004 and 42 are planned for procurement in fiscal year 2006. To stabilize production rates, the committee recommends an increase of \$4.0 million in APAF for the procurement of 15 additional GL-1800AP truck mounted aircraft de-icers.

### **Air Force Missiles**

#### **Advanced extremely high frequency satellite**

The budget request included \$612.0 million in PE 63430F for research and development and \$98.6 million in Missile Procurement, Air Force (MPF), for acquisition of the advanced extremely high frequency (AEHF) satellite communications program.

AEHF satellites will provide secure, survivable, jam resistant communications at much higher data rates than is currently available. At least three AEHF satellites will be required to support critical military communications, and as many as five could be needed, depending on progress in the research and development of the next generation transformational satellite (TSAT) communications system.

The committee notes that a decision on acquisition of the fourth AEHF satellite is currently scheduled for early fiscal year 2005, and will be based on progress and maturity of the TSAT development effort. The committee also notes that large, complex satellite systems, such as TSAT, have a history of schedule delays, cost overruns and technical complications. The committee remains convinced that acquisition of additional AEHF satellites is likely.

The report to the congressional defense committees by the Under Secretary of the Air Force on AEHF schedule options, submitted in accordance with Senate Report 108-46 and dated January 28, 2004, indicated that the Air Force requires funding substantially in excess of the amount authorized to be appropriated in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) and requested for the AEHF program in fiscal year 2005 to eliminate a production gap between the second and third AEHF satellites. Such production gaps will increase AEHF cost and technical risk.

The committee believes that the Air Force should take prudent steps to reduce risk to the third AEHF satellite and to ensure that a fourth AEHF satellite can be procured efficiently. Consequently, the committee recommends an increase of \$35.0 million in MPF to mitigate the effects of the production gap and for acquisition of additional AEHF spare parts and long lead items.

#### **Wideband gapfiller system**

The budget request included \$73.5 million in PE 63854F and \$40.3 million in missile procurement, Air Force (MPF), for the wideband gapfiller satellite (WGS) communications system.

WGS will provide a significant increase in communications bandwidth for warfighters. The committee notes that the Air Force

plans to acquire and launch three satellites through fiscal year 2007 and, during fiscal year 2005, to negotiate a contract to acquire two additional satellites that would be launched starting in fiscal year 2009. The Air Force acknowledges that this plan will leave a three-year production gap between satellites three and four, a gap that will increase program risk and cost resulting from parts obsolescence, personnel fluctuations, and the potential need to requalify subcontractors. The committee also notes that the Department of Defense supplements its satellite communications network by leasing commercial satellite communications capacity, at a cost of about \$300 million per year. The committee believes that deferring acquisition of additional military satellite communications will not be cost-effective.

The committee believes that the Air Force's acquisition strategy, which results in this production gap, is not well considered. To help mitigate program risks, the committee recommends an increase of \$15.0 million in MPF for additional WGS spare parts and long lead items for additional WGS satellites. The committee directs the Secretary of Defense to reexamine the WGS acquisition strategy, and to inform the congressional defense committees of any changes he recommends to that strategy.

#### **Titan**

The budget request included \$74.3 million in Missile Procurement (MPF), Air Force (MPF), for the Titan space launch vehicle.

The committee notes that since the submission of the fiscal year 2005 budget request, the Air Force has identified \$2.7 million for support to the Titan program for federally funded research and development centers that are in excess of requirements. The Air Force has also informed the committee that \$25.0 million of the request related to program close out is no longer needed because of launch delays. Therefore, the committee recommends a reduction of \$27.7 million in MPF for the Titan space launch vehicle.

#### **Evolved expendable launch vehicle**

The budget request included \$611.0 million in Missile Procurement (MPF), Air Force, to acquire space launch services in the evolved expendable launch vehicle (EELV) program.

EELV services are procured two years in advance of need, to provide the EELV contractors time to prepare for future launches. The fiscal year 2005 EELV budget request included launch services for a spaced-based infrared system (SBIRS) satellite launch in fiscal year 2007. The committee notes that this launch will be delayed at least a year because of technical difficulties in the satellite development. Therefore, the funding proposed for this launch is in excess of the need.

Consequently, the committee recommends a reduction of \$100.0 million in MPF for the EELV.

#### **Medium launch vehicle**

The budget request included \$102.9 million in Missile Procurement, Air Force (MPF), for medium launch vehicles, of which \$78.7 million is for Delta II launch services.

The committee notes that the request for Delta II launch services represents a \$19.1 million increase compared to fiscal year 2004 funding and a \$14.3 million increase compared to the fiscal year 2004 projection for fiscal year 2005. The Air Force justifies the increase by noting higher-than-anticipated man-hours required to complete contract work and growth in overhead rates. The committee believes controlling these costs should be a high priority for both the Air Force and the contractor.

The committee recommends a reduction of \$5.0 million in MPF for medium launch vehicles.

### **Other Air Force Procurement**

#### **Halvorsen loader**

The budget request included no funding in Other Procurement, Air Force (OPAF), for the Halvorsen loader, a state-of-the-art handler for off/on loading aircraft cargo. Currently, 50 Halvorsen loaders are in use in Iraq, Haiti, and Afghanistan. The Air Force released a letter on March 26, 2003 that established a requirement for 618 Halvorsen loaders. The committee noted that the Air Force procured 316 Halvorsen loaders between fiscal years 2000 and 2004, 302 Halvorsen loaders short of the requirement. The committee recommends an increase of \$6.4 million in OPAF for the procurement of 20 Halvorsen loaders, for a total authorization of \$6.4 million.

#### **Personnel safety and rescue equipment**

The budget request included \$13.0 million in Other Procurement, Air Force (OPAF), for items less than \$5.0 million in personnel safety and rescue equipment, including \$1.7 million for ejection seat leg restraint upgrade kits for the ACES II ejection seat and \$2.0 million for survival radio test sets. There was no funding for fixed aircrew standardized seats (FASS).

The ejection seat leg restraint upgrade kits would enhance the escape path clearance for aircrew forced to eject. The procurement of additional kits is included on the Air Force Chief of Staff's Unfunded Priority List. The committee recommends an increase of \$6.0 million in OPAF for leg restraint upgrade kits for the ACES II ejection seat.

The survival radio test sets are the current generation, self-contained, transportable, semi-automated systems that are fielded for use. These systems are used to test full functionality to ensure signal quality of all survival radios and emergency locator beacons used by Air Force aircrews. The committee recommends an increase of \$4.0 million in OPAF for survival radio test sets.

The FASS program is applicable to C-130, C-135, C-5, E-3, and E-8 aircraft, which currently use 20 unique seat designs. The FASS program would produce a family of nine standardized crew seats, decreasing the logistical burden in supporting these seats. The committee recommends an increase of \$2.8 million in OPAF for FASS.

The committee recommends a total authorization of \$25.8 million in OPAF, line 88.

### **Point of maintenance/combat ammunition system**

The budget request included \$16.2 million in Other Procurement, Air Force (OPAF), for mechanized material handling equipment, but included no funds for the point of maintenance/combat ammunition system (POMX/CAS). The POMX/CAS is an automatic data collection program that was developed by the automatic identification technology program within the Air Force. POMX/CAS reduces the burden on flight line personnel by streamlining mission critical data collection through the use of handheld computer devices, networks, and software now in widespread commercial use. The committee recommends an increase of \$6.0 million in OPAF for the continued procurement of POMX/CAS.

### **Combat arms training system**

The budget request included \$8.4 million in Other Procurement, Air Force (OPAF), for base procured equipment, but included no funding for combat arms training systems (CATS). The CATS provides a simulated environment where airmen can practice various aspects of firearms proficiency and safety. The committee recommends an increase of \$3.0 million in OPAF for the procurement of CATS.

## **Subtitle E—Other Matters**

### **Report on options for acquisition of precision-guided munitions (sec. 141)**

The committee recommends a provision that would require the Secretary of Defense to submit a report to the congressional defense committees on inventories and production rates of precision-guided munitions by March 1, 2005. Section 820 of the National Defense Authorization Act for Fiscal Year 2000 required the Secretary to submit a similar report on the required inventory levels of these weapons that would enable the Department of Defense to execute the National Military Strategy (NMS) of fighting two nearly simultaneous Major Theater Wars, in effect at the time.

The committee believes that this report should be updated to reflect the increased use of precision-guided weapons in recent conflicts, introduction of new precision-guided weapons into the inventory, and the new NMS.

The report must include: (1) a list of precision-guided weapons; (2) the current inventory of each of these weapons; (3) the inventory objective of each of these weapons necessary to execute the current NMS; (4) the year that the inventory objective for each of these weapons will be achieved at the minimum sustained production rate, the most economic production rate, and the maximum production rate; and (5) the cost, in constant fiscal year 2004 dollars, to produce each of these weapons at the minimum sustained production rate, the most economic production rate, and the maximum production rate.

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>			<u>Senate</u>		
			<u>Qty</u>	<u>Request</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Procurement, Defense-Wide</b>						
		<b>Major Equipment</b>						
		<b>Major Equipment, OSD/WH</b>						
0300	1	WHS MOTOR VEHICLES	1	40	125,320		1	40
0300	2	PROCUREMENT DEFENSE WIDE			23,324			125,320
0300	3	MAJOR EQUIPMENT, WHS						23,324
		<b>Major Equipment, NSA</b>						
0300	4	CONSOLIDATED CRYPTOLOGIC PROGRAM	[ ]	[ ]	[ ]			
0300	5	INFORMATION SYSTEMS SECURITY PROGRAM (ISSP)			10,487			10,487
0300	6	DEFENSE AIRBORNE RECONNAISSANCE PGM	[ ]	[ ]	[ ]			
0300	7	DEFENSE INTELLIGENCE COUNTERDRUG PROGRAM	[ ]	[ ]	[ ]			
		<b>Major Equipment, DISA</b>						
0300	8	ADNET			44,827			44,827
0300	9	INFORMATION SYSTEMS SECURITY						
0300	10	CONTINUITY OF OPERATIONS			4,261			4,261
0300	11	DEFENSE MESSAGE SYSTEM			5,187			5,187
0300	12	GLOBAL COMMAND AND CONTROL SYS			2,639			2,639
0300	13	GLOBAL COMBAT SUPPORT SYSTEM			42,710			42,710
0300	14	TELEPORTS						
0300	15	GLOBAL INFORMATION GRID			38,217			38,217
0300	16	ITEMS LESS THAN \$5 MILLION						
		<b>Major Equipment, DIA</b>						
0300	17	INTELLIGENCE AND COMMUNICATIONS	[ ]	[ ]	[ ]			
0300	18	INTELLIGENCE PLANNING AND REVIEW ACTIVITIES	[ ]	[ ]	[ ]			
0300	19	INTEL SUPPORT TO OSD COUNTER-NARCOTICS	[ ]	[ ]	[ ]			
0300	20	MOBILE SURVEY GROUP	[ ]	[ ]	[ ]			

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Authorized</u>	<u>Qty</u>	<u>Cost</u>
		DEFENSE HUMINT INTELLIGENCE (HUMINT) PROGRAM	[ ]	[ ]				
0300	21	Major Equipment, DLA						
0300	22	MAJOR EQUIPMENT		7,874				7,874
0300	23	Major Equipment, DCAA						
0300	23	ITEMS LESS THAN \$5 MILLION		1,496				1,496
0300	24	Major Equipment, TJS						
0300	24	MAJOR EQUIPMENT, TJS		47,633				47,633
0300	25	Missile Defense Agency						
0300	25	PATRIOT PAC-3						
0300	26	Major Equipment, DHRA						
0300	26	PERSONNEL ADMINISTRATION		7,187				7,187
0300	27	National Geospatial Intelligence Agency						
0300	27	MAJOR EQUIPMENT, NSA	[ ]	[ ]				
0300	28	Defense Threat Reduction Agency						
0300	28	VEHICLES		80				80
0300	29	OTHER MAJOR EQUIPMENT		23,772				23,772
0300	30	Defense Security Cooperation Agency						
0300	30	OTHER MAJOR EQUIPMENT						
0300	31	Major Equipment, AFIS		6,977				6,977
0300	31	MAJOR EQUIPMENT, AFIS						
0300	32	Major Equipment, DODDE		2,965				2,965
0300	32	AUTOMATION/EDUCATIONAL SUPPORT & LOGISTICS						
0300	33	Major Equipment, DCMA		18,945				18,945
0300	33	MAJOR EQUIPMENT						



## (Dollars in Thousands)

Account	Line	Program Title	FY 2005			Senate			Senate		
			Qty	Request	Cost	Qty	Change	Cost	Qty	Authorized	Cost
0300	34	Major Equipment, DTSA			628					628	
0300	35	MAJOR EQUIPMENT									
0300	35	MAJOR EQUIPMENT, CIFA									
0300	35	TSCM EQUIPMENT									
0300	36	Major Equipment, NDU			348					348	
0300	36	NATIONAL DEFENSE UNIVERSITY									
0300	36	Special Operations Command									
0300	37	Aviation Programs			447,272					454,272	
0300	37	ROTARY WING UPGRADES AND SUSTAINMENT									
0300	37	MH-47ED IR suppression								7,000	
0300	38	SOF TRAINING SYSTEMS			49,192					[7,000]	
0300	39	MC-130H, COMBAT TALON II			82,079						49,192
0300	40	CV-22 SOF MOD			126,083						82,079
0300	41	AC-130U GUNSHIP ACQUISITION			10,243						126,083
0300	42	C-130 MODIFICATIONS			110,666						10,243
0300	43	AIRCRAFT SUPPORT			387						110,666
0300	44	Shipbuilding									387
0300	44	ADVANCED SEAL DELIVERY SYSTEM (ASDS)			29,262						29,262
0300	44	LESS: ADVANCE PROCUREMENT (PY)			-23,398						-23,398
0300	45	ADVANCE PROCUREMENT (CY)			34,921						34,921
0300	46	MK8 MOD1 SEAL DELIVERY VEHICLE			1,768						1,768
0300	47	Ammunition Programs									
0300	47	SOF ORDNANCE REPLENISHMENT			34,380						34,380
0300	48	SOF ORDNANCE ACQUISITION			12,166						12,166

# **Title I - Procurement** (Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>
			<u>Qty</u>	<u>Request</u>	<u>Change</u>	<u>Authorized</u>	
				<u>Cost</u>	<u>Qty</u>	<u>Cost</u>	<u>Cost</u>
<b>Other Procurement Programs</b>							
0300	49	COMMUNICATIONS EQUIPMENT AND ELECTRONICS		38,434		4,000	42,434
		Automatic equipment ID				[4,000]	
0300	50	SOF INTELLIGENCE SYSTEMS		16,946		7,300	24,246
		Joint threat warning system				[7,300]	
0300	51	SMALL ARMS AND WEAPONS		8,221		25,000	33,221
		AN/PVS-15				[5,000]	
		UAV systems				[10,000]	
		MK-47 ALGL				[10,000]	
0300	52	CLASSIFIED PROGRAMS	[ ]	[ ]			
0300	53	CLASSIFIED PROGRAM GDIP	[ ]	[ ]			
0300	54	MARITIME EQUIPMENT MODIFICATIONS		1,796			1,796
0300	55	SPECIAL APPLICATIONS FOR CONTINGENCIES		16,184			16,184
0300	56	SOF COMBATANT CRAFT SYSTEMS		7,297			7,297
0300	57	SPARES AND REPAIR PARTS		8,369			8,369
0300	58	SPECIAL PROGRAM	[ ]	[ ]			
0300	59	TACTICAL VEHICLES		493		1,000	1,493
		Militarized lightweight tactical all terrain vehicles (LTATV)				[1,000]	
0300	60	SOF MARITIME EQUIPMENT		3,449			3,449
0300	61	DRUG INTERDICTION					
0300	62	MISCELLANEOUS EQUIPMENT		16,830			16,830
0300	63	SOF PLANNING AND REHEARSAL SYSTEM		192			192
0300	64	SOF OPERATIONAL ENHANCEMENTS		233,632		5,000	238,632
		Tactical computer system				[5,000]	
0300	65	PSYOP EQUIPMENT		18,388			18,388

# **Title I - Procurement**

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Request</u>	<u>Qty</u>	<u>Change</u>	<u>Authorized</u>	<u>Cost</u>
		<b>Chemical/Biological Defense</b>						
		<b>CBDP</b>						
0300	66	INSTALLATION FORCE PROTECTION		104,935				104,935
0300	67	INDIVIDUAL PROTECTION		131,926		500		132,426
		M-45 army aircrew protective masks				[500]		
0300	68	DECONTAMINATION		11,284		6,000		17,284
		M291/M295 decon kits				[6,000]		
0300	69	JOINT BIOLOGICAL DEFENSE PROGRAM		101,097		11,000		101,097
0300	70	COLLECTIVE PROTECTION		18,394		[1,000]		29,394
		M49/M98 fixed installation filter				[10,000]		
		Chem-bio protective shelter				8,000		278,105
0300	71	CONTAMINATION AVOIDANCE		270,105		[8,000]		545,392
		ACADA						
0300	999	CLASSIFIED PROGRAMS		545,392				
		<b>WMD-CST equipment</b>				18,200		18,200
		Financial information systems				-8,900		-8,900
<b>Total - Procurement, Defense-Wide</b>				<b>2,883,302</b>		<b>84,100</b>		<b>2,967,402</b>

**Title I - Procurement**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY 2005</u>		<u>Senate</u>		<u>Senate</u>	
			<u>Qty</u>	<u>Cost</u>	<u>Change</u>	<u>Qty</u>	<u>Authorized</u>	<u>Cost</u>
		National Guard & Reserve Equipment						
		Reserve Equipment						
		ARMY RESERVE						
	1	MISCELLANEOUS EQUIPMENT						
		NAVY RESERVE						
	2	MISCELLANEOUS EQUIPMENT						
		MARINE CORPS RESERVE						
	3	MISCELLANEOUS EQUIPMENT						
		AIR FORCE RESERVE						
	4	MISCELLANEOUS EQUIPMENT						
		National Guard Equipment						
		ARMY NATIONAL GUARD						
	5	MISCELLANEOUS EQUIPMENT						
		AIR NATIONAL GUARD						
	6	MISCELLANEOUS EQUIPMENT						
		<b>Total - National Guard &amp; Reserve Equipment</b>						
		Defense Production Act Purchases						
0360	1	DEFENSE PRODUCTION ACT PURCHASES		9,015				9,015
	1	DEFENSE PRODUCTION ACT PURCHASES						
		<b>Total - Defense Production Act Purchases</b>		<b>9,015</b>				<b>9,015</b>
		<b>TOTAL PROCUREMENT</b>		<b>74,662,316</b>		<b>1,808,265</b>		<b>76,470,581</b>

### **MH-47 infrared engine exhaust suppressor**

The budget request included \$2.9 million in Procurement, Defense-wide, for Special Operations Forces (SOF), Rotary Wing Upgrades for nine infrared engine exhaust suppressor sets for U.S. Army MH-47E/D (IES-47) special operations aircraft.

The MH-47 Chinook aircraft has proved to be a critical workhorse in the global war on terrorism, providing heavy lift, even at high operating altitudes. While a durable system, the MH-47 is vulnerable to heat-seeking weapons. Installation of infrared exhaust suppressors significantly reduces this vulnerability. U.S. Special Operations Command (SOCOM) has a requirement for 61 IES-47 sets to equip all MH-47E/D aircraft, plus four spares for a total of 65 sets. Currently, only 18 sets are scheduled for procurement. Fully equipping the MH-47E/D fleet is the second highest priority of the Commander, SOCOM, for additional funding.

The committee recommends an increase of \$7.0 million in Procurement, Defense-wide, for SOF, Rotary Wing Upgrades, to procure 27 additional IES-47 sets.

### **Automatic identification technology**

The budget request included \$38.4 million in Procurement, Defense-wide, for Special Operations Forces (SOF), Communications and Electronics, but did not include funding for automatic identification technology for the purpose of tracking and maintaining equipment inventories.

SOF have a mix of equipment items that are common to other services, as well as a large number of SOF unique items. Inventory and tracking of these items, as they are deployed and recovered for training and operations and when they require maintenance at a higher level, is manpower intensive and very time-consuming. The Department of Defense has issued directives requiring all services, including U.S. Special Operations Command (SOCOM), to implement a program for the automatic identification of tangible items.

The committee recommends an increase of \$4.0 million in Procurement, Defense-wide, SOF, Communications and Electronics, to accelerate the fielding of automatic identification technology to SOCOM and its component commands.

### **Joint threat warning system**

The budget request included \$5.9 million in Procurement, Defense-wide, for Special Operations Forces (SOF), Intelligence Systems, for continued procurement of the Joint Threat Warning System (JTWS).

The JTWS is a modular, lightweight ground signals intelligence system that can be mounted on a variety of special operations forces (SOF) delivery platforms, providing threat warning, situational awareness, and enhanced force protection for SOF elements. JTWS is an evolutionary acquisition program that builds upon previous efforts to separately acquire similar warning systems for air, ground, and maritime applications. Accelerating the procurement of this capability is one of the highest priorities of the Commander, U.S. Special Operations Command, for additional funding.

The committee recommends an increase of \$7.3 million in Procurement, Defense-wide, SOF, Intelligence Systems, to procure additional JTWS systems.

#### **Advanced lightweight grenade launcher**

The budget request included \$8.2 million in Procurement, Defense-wide, for Special Operations Forces, Small Arms and Weapons, for the U.S. Special Operations Command (SOCOM), but did not include funding for the Advanced Lightweight Grenade Launcher (ALGL).

The ALGL system provides a much improved capability over the Mark 19 grenade launcher it replaces. The objective inventory for the ALGL is 547 launchers, of which 328 were procured in fiscal year 2004. An additional 219 launchers are required to equip all special operations forces. The ALGL weapons system has proven very effective in recent military operations, and is a high priority of the Commander, SOCOM, for additional funding.

The committee recommends an increase of \$10.0 million in Procurement, Defense-wide for SOF, Small Arms and Weapons, to continue fielding this important weapon system.

#### **AN/PVS-15 binocular night vision systems**

The budget request included no funding in Procurement, Defense-wide, for Special Operations Forces (SOF), Small Arms and Weapons, for continued procurement of the AN/PVS-15 binocular night vision system (BNVS).

The AN/PVS-15 BNVS is a ruggedized, lightweight, self-contained twin tube goggle system that can be helmet mounted or handheld, and offers significantly improved depth perception and vision continuity in variable light conditions for special operations forces. This system is a high priority of the Commander, U.S. Special Operations Command, for additional funding.

The committee recommends an increase of \$5.0 million in Procurement, Defense-wide, SOF, Small Arms and Weapons, to procure approximately 715 additional AN/PVS-15 binocular night vision systems.

#### **Special operations forces unmanned aerial vehicle systems**

The budget request included no funding in Procurement, Defense-wide, for Special Operations Forces (SOF), Small Arms and Weapons, for unmanned aerial vehicle (UAV) systems for the U.S. Special Operations Command (SOCOM).

An urgent requirement for small transportable UAV systems for SOF was validated after submission of the fiscal year 2005 budget request. These UAV systems will support SOF teams operating independently, with critical reconnaissance, surveillance, communications, and force protection capabilities. Similar experimental systems have proven useful in recent military operations. This UAV capability is the highest priority of the Commander, SOCOM, for additional funding.

The committee recommends an increase of \$10.0 million in Procurement, Defense-wide, for SOF, Small Arms and Weapons, for procurement of SOF UAV systems.

### **Light tactical all-terrain vehicles**

The budget request did not include funding to sustain the light tactical all-terrain vehicles (LTATV) currently used by the U.S. Special Operations Command (SOCOM).

The LTATV is a highly deployable, maneuverable all-terrain vehicle that provides much needed mobility support for special operations forces (SOF) operating in difficult terrain that is inaccessible to normal tactical vehicles. SOCOM is in the process of assessing its future requirements for such vehicles and developing new multi-fuel engines that will meet regulatory guidelines, but in the interim, sustainment of the current fleet of LTATV's is important.

The committee recommends an increase of \$1.0 million in Procurement, Defense-wide, for SOF, Tactical Vehicles, to procure support equipment for the existing LTATV fleet. The committee also recommends an increase of \$1.0 million in Operation and Maintenance, Defense-wide, Budget Activity 1, Special Operations Command, to fund sustainment and maintenance activities for the LTATV fleet.

### **Tactical computer system**

The budget request included \$233.6 million in Procurement, Defense-wide, for Special Operations Forces (SOF), Operational Enhancements, but did not include funding to procure small, ruggedized personal data assistants (PDA) that allow SOF to participate in a tactical surveillance, targeting and acquisition network (STAN).

The technology associated with PDA's has advanced to a point that these small computer systems can be adapted to the tactical battlefield requirements of SOF operators. To minimize the amount of equipment that an operator must carry, systems have been developed that can receive imagery from overhead platforms, share map and planning data in local wireless networks, serve as a wireless communications device, and provide friendly force location information. The combination of these capabilities in a single, handheld system that can connect to the SOF STAN gives SOF operators a powerful situational awareness and communications capability, while decreasing equipment complexity and individual load.

The committee recommends an increase of \$5.0 million in Procurement, Defense-wide, SOF, Operational Enhancements, to procure tactical computer systems.

### **M45 Army Aircrew Protective Mask**

The budget request included \$131.9 million in Procurement, Defense-wide, for chemical and biological individual protection equipment, including several types of protective masks. The request, however, included no funding for the M45 Army Aircrew Protective Mask. The committee recommends an increase of \$500,000 in Procurement, Defense-wide individual protective equipment for additional M45 Army Aircrew Protective Masks. These masks will fulfill an important interim, Army-unique requirement until the Joint Services Aircrew Mask is fielded to the services beginning in fiscal year 2006.

**M291 and M295 decontamination kits**

The budget request included \$4.9 million in Procurement, Defense-wide (PDW), for M291 decontamination kits, and no funding for procurement of M295 decontamination kits. The M291 and M295 decontamination kits provide efficient, proven and safe methods to remove toxic chemical agents from skin and equipment. These kits are used by all military services and by civilian personnel responding to chemical attacks or accidents. Therefore, the committee recommends an increase in PDW, of \$3.0 million for M291 decontamination kits and an increase in PDW, of \$3.0 million for M295 decontamination kits.

**Chemical Biological Protective Shelter**

The budget request included \$18.3 million in Procurement, Defense-wide, for collective protection equipment in the Chemical Biological Defense Program. The request, however, included no funding for continued procurement of the Chemical Biological Protective Shelter (CBPS). The committee understands that 64 CBPS units were fielded in support of Operation Iraqi Freedom (OIF). According to feedback from OIF warfighters, this system provides a significant capability to the forward-deployed units in a desert environment, by providing a highly mobile, chemically and biologically protected and environmentally controlled medical treatment facility. Therefore, the committee recommends an increase of \$10.0 million for procurement of additional CBPS units.

**M49 and M98 Fixed Installation Gas Filter**

The budget request included \$18.4 million in Procurement, Defense-wide (PDW), for collective protection equipment. The request, however, included no funding for procurement of the M49/M98 fixed installation gas filter. The committee recommends an increase of \$1.0 million in PDW, for the M49/M98 fixed installation gas filter to enable various fixed military installations both within the United States and abroad to support critical operations, including routine filter replacements.

These filters provide collective protection against chemical and biological agents at fixed sites, such as hardened underground shelters for command and control centers, medical facilities, and rest and relief areas, as well as a variety of other applications. When combined with a pre-filter and HEPA filtration, a gas filter such as the M49/M98 fixed installation gas filter minimizes the infiltration of nuclear, biological, and chemical (NBC) contamination, allowing personnel to perform their duties unencumbered by individual protective equipment.

**Automatic Chemical Agent Detector and Alarm**

The budget request included \$270.1 million in Procurement, Defense-wide (PDW), for contamination avoidance equipment. The requested funding supports the procurement of chemical and biological detection, warning and reporting, and reconnaissance systems, such as the Automatic Chemical Agent Detector and Alarm (ACADA).

The committee notes that Army National Guard units are deploying worldwide in support of military operations. They must possess



the same level of defense against chemical threats as the Active Duty units they support. Therefore, the committee recommends an increase of \$8.0 million in PDW for ACADA.

### **Items of Special Interest**

#### **Advanced SEAL Delivery System**

The Advanced Seal Delivery System (ASDS) is a miniature, combatant submarine being developed for the infiltration and exfiltration of naval special operations forces. Unlike current underwater delivery systems, ASDS would transport Navy SEALs over longer distances in a dry environment, enhancing the operators' ability to accomplish their mission once ashore.

Significant technical and financial problems have plagued this program since its inception. For the past five years, the committee has expressed increasing concern about the cost of this system and the significant performance shortfalls the program has exhibited. At the urging of the committee, the Department of Defense designated ASDS as an Acquisition Category I program in 2003, and will exercise milestone decision authority to assess the future of this program.

The first ASDS boat underwent an operational evaluation (OPEVAL), starting in April 2003, to determine the effectiveness and suitability of the boat for use in combat. The OPEVAL results were promising, but revealed significant performance shortfalls. As a result, the National Defense Authorization Act for Fiscal Year 2004 prohibited expenditure of advanced procurement funds for items associated with the second ASDS boat until after a favorable Milestone C decision, an independent cost estimate by the Cost Analysis and Improvement Group of the Office of the Secretary of Defense (OSD, CAIG), and a detailed report from the Secretary of Defense.

The requirement for an advanced SEAL delivery system remains critical for our special operations forces. Whether this particular ASDS design is the right one to meet the requirement will be determined by the Under Secretary of Defense for Acquisition, Technology and Logistics (USD, AT&L) in the Milestone C decision process.

The committee remains concerned about the technical challenges and cost growth that have occurred in the ASDS program. The Milestone C decision has been postponed until June 2004. The committee reiterates the requirement for the Secretary of Defense to notify the congressional defense committees of the results of the Milestone C decision on ASDS, and to include in his report: a detailed summary of the program's revised cost estimate and future cost estimates, as validated by the OSD, CAIG; an evaluation of contractor performance, to date; a detailed acquisition strategy; and, a plan to demonstrate realistic solutions to key technical and performance problems identified during testing and operations.

#### **Army modernization**

The budget request included \$292.2 million in the Procurement of Weapons and Tracked Combat Vehicles, Army (WTCV-A), for 67 M1A2 System Enhancement Package (SEP) tanks. This request,

coupled with the funds authorized in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) and appropriated in the Making Appropriations for the Department of Defense for the Fiscal Year Ending September 30, 2004 and for Other Purposes (Public Law 108–87), completes procurement of sufficient M1A2 SEP tanks and M2A2 Operation Iraqi Freedom (M2A2 OIF) Bradley Fighting Vehicle upgrades to make all M1A2 SEP tanks and M2A2 OIF Bradley Fighting Vehicles in the 3rd Armored Cavalry Regiment identical to each other. As this committee has previously noted, the concept of make all fighting vehicles within a class of vehicles identical to each other increases combat capability and pays dividends in training and reduced logistical footprint.

The committee is concerned that the Army does not plan to modernize the 3rd Infantry Division with its most modern tank, the M1A2 SEP, even though the division is part of the counter-attack corps along with two modernized divisions and the soon to be modernized 3rd Armored Cavalry Regiment. The M1A2 SEP tank has superior onboard computer systems, which enables integration with the Force XXI Battle Command Brigade and Below communications system, and night vision capabilities—two battle-proven capabilities employed in Operation Iraqi Freedom. In fact, this committee has been briefed that the Army intends to retire or “mothball” the M1A2 tank, a vehicle that has more capability than the M1A1 tank the Army intends to retain with the 3rd Infantry Division. The retired M1A2 tanks would be used as a source of repair parts for the M1A2 SEP fleet. The committee is concerned about such a plan and does not understand the Army’s rationale for this decision.

The committee understands that, beginning in fiscal year 2004, the Army intends to reorganize its force by resetting Active and Reserve component brigades returning from Iraq and Afghanistan rotations, adding 10 additional brigades to the 33 maneuver brigades in the Active component by 2006, and deciding in 2007 whether to add another five. These brigades will be of similar design, as will the 34 brigades that will result from a planned Army National Guard reorganization. The intent is to create a modular brigade-based Army that is more responsive to combatant commanders’ needs.

The committee directs the Secretary of the Army to submit a report to the congressional defense committees, at the time of the submission of the fiscal year 2006 budget request, which updates the Army’s modernization plan, including the strategies for resetting the rotational force and sustaining required levels of readiness, reorganizing the Army in a modular design, and equipping that reorganized force. The modernization plan will contain detailed schedule and cost estimates for implementing those strategies. The plan will also include a discussion of options for the remaining M1A2 tanks in active service, the upgrade of those tanks to the SEP configuration, and the retirement of those tanks and the rationale for doing so.

#### **Combat search and rescue radios**

The budget requests included \$28.8 million in Other Procurement, Army, \$13.9 million in Other Procurement, Air Force, and

\$9.2 million in Other Procurement, Navy (OPN), for the procurement of combat survivor evader locator radios (CSEL). The budget request also included \$6.2 million in OPN for the procurement of the new survival radio, at a much reduced unit cost compared to CSEL.

The committee has been informed that many military units are procuring combat search and rescue (CSAR) radios with limited Operation and Maintenance (O&M) funds to meet immediate, urgent requirements. The committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to examine this situation as a matter of urgency, and to report to the Committee on Armed Services of the Senate by October 14, 2004, on: (1) the adequacy of current and planned inventories of CSAR radios for each of the services; (2) the reasons that O&M funds are being used to purchase CSAR radios; and (3) a recommended Department-wide strategy for procurement of CSAR radios that will meet the needs of the services.

#### **Re-engining of the E-8C joint surveillance and target radar attack system aircraft**

The conference report accompanying the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) included a requirement for the Secretary of Defense to submit a report to the congressional defense committees by February 13, 2004, that provides an economic analysis of options for maintaining engines for the E-8C joint surveillance and target attack radar system (JSTARS) aircraft. The conferees believed that a future E-8C re-engining program might be necessary. The report has not yet been received by the congressional defense committees. If the report recommends that a re-engining program be pursued for the E-8C aircraft, the committee encourages the Air Force to initiate this program taking into account the recommendations of the report on how best to implement the program.

#### **Strategic mobility**

The "Mobility Requirements Study for Fiscal Year 2005" (MRS-05) was delivered to Congress in March 2001, and was predicated on the National Military Strategy (NMS) of fighting two nearly simultaneous wars. The MRS-05 established a moderate-risk airlift requirement of 54.5 million ton-miles a day. A related report, the "Tanker Requirements Study for Fiscal Year 2005", stated that 500 to 600 aerial refueling tankers were required to support mobility and in-theater tanking requirements.

The Senate report (S. Rept. 108-46) to accompany the Senate version of the National Defense Authorization Act for Fiscal Year 2004 (S. 1050) directed the Commander, U.S. Transportation Command, to verify the relevancy of MRS-05 in light of the new National Security Strategy and recent experiences in Operation Enduring Freedom and Operation Iraqi Freedom. This report was delivered to Congress in March 2004, and stated that: "The 54.5 million ton-mile a day requirement is understated and is at least 57.4 to 60.0 million ton-miles a day."

In testimony before the Seapower Subcommittee of the Committee on Armed Services of the Senate on March 10, 2004, the

Commander, U.S. Transportation Command, testified that a new Mobility Capabilities Study (MCS) was being started which would update the mobility requirements. He further stated that, at a minimum, the Air Force would need 222 C-17 aircraft.

The current multiyear procurement for C-17 aircraft will end with the delivery of 180 aircraft. There is an option on the current contract which, if exercised, would end with the delivery of 222 C-17s. The committee directs the Air Force to take full account of the position of the Commander, U.S. Transportation Command, in formulating its procurement plans for C-17 aircraft.

There are currently two modernization programs for C-5 aircraft, the avionics modernization program (AMP) and the reliability and re-engining program (RERP). Section 132 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) prohibits the Secretary of the Air Force from retiring C-5 aircraft below a level of 112 aircraft until certain tests are conducted on a C-5A aircraft that has incorporated the AMP and RERP modifications. The committee believes that, to meet the airlift requirements that will be established by the MCS, the Air Force will need to retain and modernize a significant number of C-5 aircraft in addition to buying additional C-17s.

Since aerial refueling is a key enabler for both mobility and the conduct of operations, the committee would expect that the MCS would also examine the requirement for aerial refueling aircraft, in both numbers and capabilities. This examination should be informed by the ongoing analysis of alternatives for aerial refueling that is being conducted pursuant to section 134 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136). The committee directs the Comptroller General (U.S.) to monitor the processes used to conduct the MCS, and to report on the adequacy and completeness of the study to the congressional defense committees no later than 30 days after the completion of the study.

## **TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION**

### **Explanation of tables**

The following tables provide the program-level detailed guidance for the funding authorized in title II of this Act. The tables also display the funding requested by the administration in the fiscal year 2005 budget request for research, development, test and evaluation programs, and indicate those programs for which the committee either increased or decreased the requested amounts. As in the past, the administration may not exceed the authorized amounts (as set forth in the tables or, if unchanged from the administration request, as set forth in budget justification documents of the Department of Defense) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

**NATIONAL DEFENSE AUTHORIZATION FOR FISCAL YEAR 2005**  
(Dollars in Thousands)

<u><b>Title II -- RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION</b></u>	<u><b>Authorization Request</b></u>	<u><b>Senate Change</b></u>	<u><b>Senate Authorized</b></u>	
Research, Development, Test & Evaluation, Army	9,266,258	420,700	9,686,958	
Research, Development, Test & Evaluation, Navy	16,346,391	333,000	16,679,391	
Research, Development, Test & Evaluation, Air Force	21,114,667	149,600	21,264,267	
Research, Development, Test & Evaluation, Defense-wide	20,739,837	-103,900	20,635,937	
Operational Test & Evaluation	305,135	4,000	309,135	
<b>TOTAL RDT&amp;E</b>	<b>67,772,288</b>	<b>803,400</b>	<b>68,575,688</b>	

## **Subtitle A—Authorization of Appropriations**

### **Science and technology**

The committee commends the Department of Defense for its commitment to the importance of science and technology (S&T) programs. The Science and Technology Program budget request has increased by 22 percent over the last three fiscal years, keeping pace with the overall increased investment in defense spending. However, at \$10.55 billion, or 2.62 percent of the overall Department's budget, the request falls short of the Department's stated goal of three percent of total funding for S&T. The committee urges the Department to increase its efforts to meet this important goal for its long-range programs.

The Department faces pressing and competing priorities and challenging operational requirements. In confronting, adapting to, and surmounting these challenges, which are represented by unexpected low- and high-tech threats, interoperability of new capabilities, such as unmanned systems and coalition forces, and rapid response demands, the Department's S&T investment remains a key transformational enabler.

As has been demonstrated in recent operations, stable long-term investments in basic and applied research have led to critical force protection technologies, stand off sensing and detection capabilities, and improved, precision lethality. Future technological innovations resulting from basic research and scientific endeavors, as well as rapid transition and adaptation of old capabilities in new ways, will ensure the continued technological superiority of the U.S. military. The committee recommends an increase of over \$445 million for S&T programs, including an increase of: approximately \$40 million in projects designed to combat terrorism; over \$30 million toward development of future weapons systems; almost \$70 million for unmanned systems; and approximately \$100 million for the future force and force protection.

The committee supports the Department's efforts to recruit and retain scientists and engineers (S&E) in national security critical disciplines, such as ocean acoustics, hypervelocity physics, energetics, propulsion, and adaptive optics, and has provided authorization for a pilot program to further the Department's S&E workforce goals.

The committee remains concerned with the increasingly near-term, applied nature of the S&T program and recommends a renewed focus on the kind of discovery-oriented research, informed by the military mission, that has yielded tangible benefits for today's warfighter. The committee recommends an increase of approximately \$80 million in these fundamental research programs.

It is the courage and commitment of our soldiers, sailors, airmen, and marines that make the U.S. military the finest fighting force in the world. When that courage and commitment is coupled with the finest technology America's scientists and engineers have to offer, the effectiveness of America's warfighter is dramatically increased.

### **Subtitle B—Program Requirements, Restrictions, and Limitations**

#### **DD(X) destroyer (sec. 211)**

The committee recommends a provision that would authorize the Secretary of the Navy to fund the second destroyer of the DD(X)-class with Research, Development, Test, and Evaluation, Navy (RDTE, N), funds, and would direct that \$99.4 million be authorized for the detail design of that second ship.

The Committee on Armed Services of the Senate, in its report (S. Rept. 108–46) to accompany the National Defense Authorization Act for Fiscal Year 2004, directed the Secretary of the Navy to provide a report on the viability of the surface combatant industrial base, with specific focus on the transition from the DDG–51 *Arleigh Burke*-class destroyers to the DD(X). This report was delivered to the congressional defense committees in March 2004. The report included a workload analysis that showed that if the DD(X) schedule slips, the shipyard that is scheduled to build the follow ship, the second destroyer of the DD(X)-class, could experience significant workload issues which, depending on the length of the schedule slip, could affect the financial viability of the this shipyard. This is exacerbated by the fact that this shipyard's workload and resultant viability is solely dependent on the design and construction of surface combatants.

The committee remains concerned about the viability of the competitive industrial base for the design and construction of surface combatants for the Navy. According to the Future Years Defense Program (FYDP), there will be no surface combatants in the budget request for fiscal year 2006. The budget request for fiscal year 2005 includes \$3.5 billion for the construction of the last three DDG–51 *Arleigh Burke*-class destroyers, bringing the inventory to 62 of these multi-mission ships. The next class of destroyers will use the DD(X) design. The first of these ships is being funded with incremental RDTE,N funding starting with \$221.1 million of construction money in fiscal year 2005. If the current schedule is maintained, the contract for the second ship of the DD(X)-class will not be awarded for about eighteen months, and is expected in fiscal year 2007 using Shipbuilding and Conversion, Navy (SCN), funding. This gap could jeopardize the design and production capability of the shipyard scheduled for the second ship.

The Navy had originally planned to compete the construction phase of the first DD(X), but recently made a decision to award that contract on a sole-source basis to the shipyard with lead design responsibility. The committee expects the Navy to take all actions necessary to ensure the viability of the second shipyard in order to maintain a healthy and competitive industrial base for surface combatants. The committee believes that the Navy is responsible for ensuring that both shipyards share equitably in the DD(X) design effort from this point forward to facilitate a smooth transition from design to fabrication to construction of DD(X).

The committee believes that if the flexibility provided by using RDTE,N funds for the lead ship at the lead shipyard is justified, that same flexibility is necessary for the follow ship at the second shipyard as well.



The budget request included \$1.4 billion in PE 64300N for DD(X) total ship engineering. The committee recommends an increase of \$99.4 million in PE 64300N to accelerate design efforts at the follow shipyard for the second DD(X)-class destroyer, for the purpose of sustaining a competitive industrial base for surface combatant ships.

### **Global Positioning System III (sec. 212)**

The committee recommends a provision that would prohibit obligation or expenditure of more than 80 percent of the amount authorized for appropriation in this Act for the Global Positioning System III (GPS III) until the Secretary of Defense: (1) completes an analysis of alternatives for next-generation GPS capabilities; and (2) provides a report to the congressional defense committees that assesses the results of this investigation.

The committee understands that GPS capabilities are critical to military navigation, precision munitions and other military applications, and recognizes that jamming of GPS signals by U.S. adversaries is a serious concern. The committee notes that the Air Force is planning to develop and acquire next generation GPS III satellites to address jamming threats and to improve geolocational accuracy. Current Air Force planning indicates that GPS III will be a large satellite with a directional antenna and sufficient power to overcome most jamming signals and satellite crosslinks that will allow improved accuracy.

The committee believes that the GPS operational control segment, user equipment and networking techniques could also be effective in overcoming jamming and improving system accuracy. The committee believes that a thorough investigation of tactics, techniques and procedures, and alternative architectures and technologies is justified before proceeding with detailed design work on the GPS III satellite.

### **Initiation of concept demonstration of Global Hawk high altitude endurance unmanned aerial vehicle (sec. 213)**

The committee recommends a provision that would amend section 221 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106–398), by changing the date by which the Secretary of Defense is to initiate the demonstration of the Global Hawk high altitude endurance unmanned aerial vehicle (HAE UAV) from March 1, 2001 to March 1, 2005.

Section 221 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106–398) directed that the Air Force use available non-developmental technology on a Global Hawk to demonstrate its operational viability in an airborne air surveillance role in the Southern Command (SOUTHCOM) area of responsibility (AOR). The purpose of this demonstration was to determine whether the Global Hawk HAE UAV, operated by SOUTHCOM, could alleviate the operational demands on the fleet of E–3A Airborne Warning and Control (AWACS) aircraft in the counter-drug air surveillance mission. The Senate Report (S. Rept. 106–292) to accompany its version of the bill stated that the Air Force should acquire and integrate a non-developmental, active electronically scanned array (AESA) radar for this purpose. Subse-

quently, the Air Force suggested that algorithms be developed in the existing ground moving target indicator (GMTI) that would give the vehicle an air surveillance capability as an airborne moving target indicator (AMTI). The committee was satisfied with this technical approach.

The committee is aware that world events dictated the use of developmental Global Hawk HAE UAVs in Operation Enduring Freedom and Operation Iraqi Freedom. Shortages in sensor packages became a problem with losses of several Global Hawk HAE UAVs during developmental testing and during Operation Enduring Freedom.

The committee received a letter from the Air Force in January 2004, stating that the Air Force planned to execute the demonstration in the spring of 2004, but without the Airborne Moving Target Indicator (AMTI) mode integrated into the sensor, which would impact the program of record. The Air Force assumes this would meet the intent of the legislation. The committee disagrees. The intent of the legislation continues to be to ascertain the feasibility of the Global Hawk HAE UAV in an airborne air surveillance mode, with an objective of reducing dependence on the high-demand, low-density AWACS fleet for counter-drug operations in the SOUTHCOM AOR.

#### **Joint unmanned combat air systems program (sec. 214)**

The committee recommends a provision that would establish an executive committee to provide guidance and recommendations to the joint unmanned combat air systems (J-UCAS) program office in the Defense Advanced Research Projects Agency (DARPA). The budget request included \$284.6 million in PE 63400D8Z and \$422.9 million in PE 64400D8Z for J-UCAS. The J-UCAS program is a consolidation of what had been two individual unmanned combat air vehicle (UCAV) programs in the Navy and the Air Force, managed by their respective Services. Management responsibility for J-UCAS has been assigned to DARPA.

In testimony before the AirLand Subcommittee of the Committee on Armed Services of the Senate on March 24, 2004, the Assistant Secretary of the Navy for Research, Development, and Acquisition, and the Assistant Secretary of the Air Force for Acquisition indicated that they did not have substantial insight into or oversight over this important program since the change in management. The committee is concerned that the lack of high-level participation from the Service's acquisition and requirements officials will result in a product that will not be considered cost-effective when ready for transition back to the Services. The J-UCAS program plan is to have vehicles ready for operational assessments between fiscal years 2007 and 2009.

The executive committee established by this provision would ensure the necessary high-level Service participation in this important program. The provision provides that the Undersecretary of Defense for Acquisition, Technology, and Logistics will chair the executive committee. The provision also directs that executive committee membership will consist of the following individuals, at a minimum: (1) the Assistant Secretary of the Navy for Research, Development, and Acquisition; (2) the Assistant Secretary of the

Air Force for Acquisition; (3) the Deputy Chief of Naval Operations for Warfare Requirements and Programs; and (4) the Deputy Chief of Staff of the Air Force for Air and Space Operations.

The Services' unique UCAV programs were structured, to a large extent, to meet the goal established in section 220 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398) that, by 2010, one-third of the aircraft in the operational deep strike force aircraft fleet would be unmanned. While consolidation of management under DARPA should provide efficiencies and increased opportunity for common operating systems, avionics, engines, sensors, and weapons, it is imperative that the Services have direct input in this program. The committee is particularly interested in ensuring that, when the operational assessments are made, it include a robust assessment of carrier suitability for naval use.

#### **Joint strike fighter aircraft program (sec. 215)**

The committee recommends a provision that would require the Secretary of Defense to direct the Defense Science Board (DSB) to conduct a study and provide a report to the congressional defense committees on the Joint Strike Fighter (JSF), concurrent with the delivery of the President's budget request for fiscal year 2006.

The committee is aware that recent design reviews indicate that all three variants of the JSF exceed the weight that is necessary to deliver the required performance. The excess weight would particularly detract from the performance of the short takeoff and vertical landing (STOVL) variant of the aircraft, causing it to fall short of several key performance parameters. The excess weight would detract from the performance of the conventional takeoff and landing (CTOL) and aircraft carrier (CV) variants to a lesser extent.

In conducting the study required by this provision, the DSB should thoroughly examine all three variants in the JSF program, and document its findings in a report. The report should include, at a minimum: (1) the current status of the JSF program; (2) the extent of the effects of the excess weight on estimated performance; (3) the validity of the technical approaches being considered to regain the required performance; (4) a risk assessment of the technical approaches being considered to regain the required performance; and (5) a list of any alternative technical approaches that might help to regain the required performance.

#### **Joint Experimentation (sec. 216)**

The committee recommends a provision that would require the Secretary of Defense to establish a separate, dedicated program element in Research, Development, Test and Evaluation, Defense-wide, for joint experimentation activities conducted by the Commander, U.S. Joint Forces Command (JFCOM). When initially established in 1998, JFCOM received most of its funding through existing Navy budget lines because the Navy assumed executive responsibility for JFCOM activities as tenant activities on Naval facilities in the Norfolk, Virginia area. Over the past seven years, the responsibilities and activities of JFCOM have grown and evolved significantly. The budget request for joint experimentation in fiscal

year 2005 is \$167.6 million. The committee commends the Commander, JFCOM, for the progress achieved in developing joint concepts and capabilities, and believes that these important activities should be managed in separate, readily identifiable budget lines.

### **Subtitle C—Ballistic Missile Defense**

#### **Fielding of ballistic missile defense capabilities (sec. 221)**

The committee recommends a provision that would authorize the use of research and development funds, authorized to be appropriated in fiscal year 2005, for the Missile Defense Agency to field an initial set of ballistic missile defense capabilities.

#### **Patriot advanced capability-3 and medium extended air defense system (sec. 222)**

The committee recommends a provision that would require approval by the Director of the Missile Defense Agency of changes to technical specifications, procurement quantities, and the development schedule for the Patriot Advanced Capability-3/Medium Extended Air Defense System (PAC-3/MEADS) combined aggregate program.

The committee recognizes that the PAC-3/MEADS system has important air and cruise missile defense missions, and that it is an essential element of the ballistic missile defense (BMD) system as well. The committee remains concerned that shifting BMD research and development from the Missile Defense Agency to the Army could inhibit the full integration of the PAC-3/MEADS capabilities into the BMD system. The committee believes that Army management of the combined program will allow coordination of the system's multiple missions. However, the committee also believes that the Director of the Missile Defense Agency must have clear visibility into program decisions that could affect the integration of the combined program into the BMD system and the ability to influence any such decisions.

#### **Comptroller General assessments of ballistic missile defense programs (sec. 223)**

The committee recommends a provision that would extend for six years the requirement for the General Accounting Office (GAO) to conduct annual assessments of the extent to which the Missile Defense Agency met its cost, scheduling, testing and performance goals, and report to Congress on the results of the assessments. The National Defense Authorization Act for Fiscal Year 2002 (Public Law 107-107) required such reports following fiscal years 2002 and 2003. This provision would require such reports following fiscal years 2004 through 2009.

### **Subtitle D—Other Matters**

#### **Annual report on submarine technology insertion (sec. 231)**

The committee recommends a provision that would require the Secretary of Defense to submit an annual report on submarine technology insertion, concurrent with the submission of the President's budget request for fiscal years 2006, 2007, 2008, and 2009.

Section 131 of the National Defense Authorization Act for Fiscal Year 1996 (Public Law 104–106) required a similar report through fiscal year 2001. Since the expiration of that reporting requirement, the emphasis on submarine technology insertion appears to have waned.

The committee is disappointed with the limited funding allocated by the Department of Defense for submarine research and development, considering the vital contributions submarines make to national and joint operations. Exercises such as Giant Shadow, conducted in January 2003, demonstrated the potential of various technologies that could be inserted into the submarine fleet. The committee believes the Department should emphasize those submarine technologies that will reduce the production and operating cost of submarines while maintaining or improving effectiveness.

The annual report should include: (1) a list of demonstrated technologies by submarine class; (2) a plan for insertion of those demonstrated technologies by submarine class, if warranted; (3) the estimated cost of this technology insertion; (4) a list of potential technologies by submarine class; and (5) a plan for demonstration of those technologies, if warranted.

#### **Additional Matters of Interest**

##### **Army**

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0601101A	1	RESEARCH, DEVELOPMENT, TEST & EVALUATION, ARMY	23,971		23,971
2040	0601102A	2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	131,206	11,500	142,706
			DEFENSE RESEARCH SCIENCES		[2,000]	
			Reactive surface technology		[3,000]	
			Flexible substrates electronics		[2,500]	
			Desert terrain prediction		[2,000]	
			Low temperature research		[2,000]	
			Advanced deployable nanosensors		2,000	
2040	0601103A	3	UNIVERSITY RESEARCH INITIATIVES	75,133	[2,000]	77,133
			Anti terrorism building and construction research		[2,000]	
2040	0601104A	4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	77,658	6,000	83,658
			Nanocomposite materials research		[2,000]	
			Ferroelectric nanodevice research		[2,500]	
			Information assurance research		[1,500]	
2040	0601105A	5	FORCE HEALTH PROTECTION	9,538		9,538
2040	0602105A	6	MATERIALS TECHNOLOGY	15,385	7,500	22,885
			Advanced materials processing		[3,000]	
			Affordable multi-utility materials		[2,000]	
			Mine detection and blast mitigation		[2,500]	
2040	0602120A	7	SENSORS AND ELECTRONIC SURVIVABILITY	25,629	1,500	27,129
			Amy small airship program		[1,500]	
2040	0602122A	8	TRACTOR HIP	6,627		6,627
2040	0602211A	9	AVIATION TECHNOLOGY	41,629	5,000	46,629
			Silver Fox		[5,000]	

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0602270A	10	ELECTRONIC WARFARE TECHNOLOGY	18,034		18,034
2040	0602303A	11	MISSILE TECHNOLOGY	51,993	6,000	57,993
			Hypersonic engine research		[2,000]	
			Air defense science and technology		[2,000]	
			Army flight test		[2,000]	
2040	0602307A	12	ADVANCED WEAPONS TECHNOLOGY	16,641	2,000	18,641
			Rapid target acquisition and tracking		[2,000]	
2040	0602308A	13	ADVANCED CONCEPTS AND SIMULATION	15,041	11,300	26,341
			Advanced modeling and simulation		[2,500]	
			Photonics research		[2,000]	
			Joint unmanned testing facility		[6,800]	
2040	0602601A	14	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	69,638	15,500	85,138
			Advanced electric drives		[3,000]	
			Clean battlefield fuel research		[3,000]	
			Advanced energy and manufacturing technology		[3,000]	
			Advanced high power rechargeable stored energy technology		[2,000]	
			Rapid prototyping		[2,000]	
			Unmanned vehicle control technologies		[2,500]	
2040	0602618A	15	BALLISTICS TECHNOLOGY	51,301		51,301
2040	0602622A	16	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY	3,476		3,476
2040	0602623A	17	JOINT SERVICE SMALL ARMS PROGRAM	5,739		5,739

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0602624A	18	WEAPONS AND MUNITIONS TECHNOLOGY Micro-laminate ceramic armor Active coating technology	44,666	9,000 [3,000] [4,000] [2,000]	53,666
2040	0602705A	19	ELECTRONICS AND ELECTRONIC DEVICES Gun recoil mitigation technologies Flexible display initiative	41,236	11,000 [8,000] [3,000]	52,236
2040	0602709A	20	Software-defined radio research	22,617		22,617
2040	0602712A	21	NIGHT VISION TECHNOLOGY COUNTERMINE SYSTEMS	20,547	4,000 [4,000]	24,547
2040	0602716A	22	Landmine detection technology	16,899		16,899
2040	0602720A	23	HUMAN FACTORS ENGINEERING TECHNOLOGY ENVIRONMENTAL QUALITY TECHNOLOGY	17,026		17,026
2040	0602782A	24	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	18,604		18,604
2040	0602783A	25	COMPUTER AND SOFTWARE TECHNOLOGY	3,982		3,982
2040	0602784A	26	MILITARY ENGINEERING TECHNOLOGY Geoscience and atmospheric research	47,152	3,000 [3,000]	50,152
2040	0602785A	27	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	15,322		15,322
2040	0602786A	28	WARFIGHTER TECHNOLOGY Smart combat suits Chem/bio protective garment Advanced structures and composites Supplemental body armor research	21,131	14,500 [2,000] [2,500] [3,000] [7,000]	35,631

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**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0602787A	29	MEDICAL TECHNOLOGY	60,877	13,200	74,077
			Fibrogen bandage development		[4,500]	
			Post traumatic stress disorder research		[2,000]	
			Non-defense research reduction		[-5,000]	
			Walter Reed Army Medical Center amputee research		[8,700]	
			Expanded anthrax research		[3,000]	
2040	0603001A	30	WARFIGHTER ADVANCED TECHNOLOGY	68,034	2,000	70,034
			Technology for human systems integration		[2,000]	
2040	0603002A	31	MEDICAL ADVANCED TECHNOLOGY	38,404	9,400	47,804
			Automatic records tracking		[2,000]	
			Wound decontamination		[3,000]	
			Electronic textiles		[3,000]	
			Digital imaging diagnosis		[1,000]	
			Non-defense research reduction		[-5,000]	
			Elastin biomaterials		[4,000]	
			Leishmaniasis		[1,400]	
2040	0603003A	32	AVIATION ADVANCED TECHNOLOGY	69,549	8,000	77,549
			Unmanned tactical combat vehicle		[8,000]	
2040	0603004A	33	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	67,622	2,000	69,622
			Advanced penetrator munitions		[2,000]	

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0603005A	34	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY	203,126	36,200	239,326
			Electrochromic materials research		[4,000]	
			Advanced thermal management controls		[3,500]	
			Fastening and joining research		[2,000]	
			Fuel cell ground support equipment demonstration		[6,100]	
			Next generation non-tactical vehicle propulsion		[3,500]	
			Tactical vehicle design tools		[2,000]	
			Armored composite cab development		[4,000]	
			Advanced armor systems		[3,000]	
			Active protection system		[3,600]	
			Common chassis design		[1,500]	
			Cannon structure design		[3,000]	
2040	0603006A	35	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY	9,946		9,946
2040	0603007A	36	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	7,288	3,000	10,288
			Coordinated training		[3,000]	
2040	0603008A	37	ELECTRONIC WARFARE ADVANCED TECHNOLOGY	41,760	7,000	48,760
			Emergency response broadband system		[3,000]	
			C4 mobile service research		[2,000]	
			Missile intercept test bed		[2,000]	
2040	0603009A	38	TRACTOR HIKE	8,035		8,035
2040	0603015A	39	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	18,072	5,500	23,572
			Test and evaluation simulations		[2,500]	
			Automatic virtual environment		[3,000]	
2040	0603020A	40	TRACTOR ROSE	4,736		4,736
2040	0603103A	41	EXPLOSIVES DEMILITARIZATION TECHNOLOGY	9,706	4,000	13,706

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
			Missile recycling		[2,000]	
			Munitions demilitarization		[2,000]	
2040	0603105A	42	MILITARY HIV RESEARCH	6,641		6,641
2040	0603125A	43	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT	3,383		3,383
2040	0603238A	44	GLOBAL SURVEILLANCE/AIR DEFENSE/PRECISION STRIKE TECHNOLOGY D	10,721		10,721
2040	0603270A	45	ELECTRONIC WARFARE TECHNOLOGY	9,382		9,382
2040	0603313A	46	MISSILE AND ROCKET ADVANCED TECHNOLOGY	92,800	7,500	100,300
			Close-in Active Protection System (CIAPS)		[7,500]	
2040	0603322A	47	TRACTOR CAGE	13,312		13,312
2040	0603606A	48	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	25,577		25,577
2040	0603607A	49	JOINT SERVICE SMALL ARMS PROGRAM	5,968		5,968
2040	0603654A	50	LINE-OF-SIGHT TECHNOLOGY DEMONSTRATION			
2040	0603710A	51	NIGHT VISION ADVANCED TECHNOLOGY	50,071	4,800	54,871
			Cost Effective Targeting Systems - demo/integrate into Stryker		[4,800]	
2040	0603728A	52	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	14,666		14,666
2040	0603734A	53	MILITARY ENGINEERING ADVANCED TECHNOLOGY	3,865	6,200	10,065
			Advanced mobile microgrid		[6,200]	
2040	0603772A	54	ADVANCED TACTICAL COMPUTER SCIENCE AND SENSOR TECHNOLOGY	31,951		31,951
2040	0603305A	55	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION(NON SPACE)	53,509	31,000	84,509
			C4ISR visualization		[3,000]	
			Integrated composite missile structure		[7,000]	
			Interactive modeling and simulation		[3,000]	
			Remote sensor monitoring technology research program		[3,000]	
			Mobile tactical high energy laser		[15,000]	

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0603308A	56	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION (SPACE)	4,871		4,871
2040	0603327A	57	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	91,713	12,000	103,713
			Adaptive integrated fire control demo program		[2,000]	
			E-STRIKE		[10,000]	
2040	0603619A	58	LANDMINE WARFARE AND BARRIER - ADV DEV	11,634		11,634
2040	0603627A	59	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-ADV DEV	6,249		6,249
2040	0603639A	60	TANK AND MEDIUM CALIBER AMMUNITION	39,697		39,697
2040	0603645A	61	ARMORED SYSTEM MODERNIZATION - ADV DEV			
2040	0603653A	62	ADVANCED TANK ARMAMENT SYSTEM (ATAS)	51,892		51,892
2040	0603747A	63	SOLDIER SUPPORT AND SURVIVABILITY	13,810		13,810
2040	0603766A	64	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM - ADV DEV	15,441		15,441
2040	0603774A	65	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT	14,047		14,047
2040	0603779A	66	ENVIRONMENTAL QUALITY TECHNOLOGY	9,356	4,600	13,956
			Manganese Health Research Project		[4,600]	
2040	0603782A	67	WARFIGHTER INFORMATION NETWORK-TACTICAL	99,645		99,645
2040	0603790A	68	NATO RESEARCH AND DEVELOPMENT	4,801		4,801
2040	0603801A	69	AVIATION - ADV DEV	12,113		12,113
2040	0603802A	70	WEAPONS AND MUNITIONS - ADV DEV	2,382	2,000	4,382
			120MM mortar family advance development		[2,000]	
2040	0603804A	71	LOGISTICS AND ENGINEER EQUIPMENT - ADV DEV	10,485	6,000	16,485
			Mobile parts hospital - continue development		[6,000]	
2040	0603805A	72	COMBAT SERVICE SUPPORT CONTROL SYSTEM EVALUATION AND ANALYSIS	6,366		6,366
2040	0603807A	73	MEDICAL SYSTEMS - ADV DEV	10,258		10,258
2040	0603850A	74	INTEGRATED BROADCAST SERVICE (JMIP/DISTP)	4,356		4,356

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0603854A	75	ARTILLERY SYSTEMS			
2040	0603856A	76	SCAMP BLOCK II	10,221		10,221
2040	0603869A	77	MEDIUM EXTENDED AIR DEFENSE SYSTEM (MEADS) CONCEPTS	264,527	64,178	328,705
			PAC-3/MEADS (transfer from 64865A, line 126)		[64,178]	
2040	0604201A	78	AIRCRAFT AVIONICS	68,857		68,857
2040	0604220A	79	ARMED, DEPLOYABLE OH-58D	20,000		20,000
2040	0604223A	80	COMANCHE			
2040	0604270A	81	ELECTRONIC WARFARE DEVELOPMENT	16,879		16,879
2040	0604280A	82	JOINT TACTICAL RADIO	121,400		121,400
2040	0604321A	83	ALL SOURCE ANALYSIS SYSTEM	5,346		5,346
2040	0604328A	84	TRACTOR CAGE	14,149		14,149
2040	0604329A	85	COMMON MISSILE	152,381		152,381
2040	0604601A	86	INFANTRY SUPPORT WEAPONS	28,187	12,500	40,687
			XM312 .50 caliber advanced crew served weapon		[4,000]	
			XM-307 25mm advanced crew served weapon		[8,500]	
2040	0604604A	87	MEDIUM TACTICAL VEHICLES	2,854	3,000	5,854
			Medium tactical vehicle R&D - accelerate FMTV replacement		[3,000]	
2040	0604609A	88	SMOKE, OBSCURANT AND TARGET DEFEATING SYS-SDD	3,798		3,798
2040	0604611A	89	JAVELIN	944		944
2040	0604622A	90	FAMILY OF HEAVY TACTICAL VEHICLES	2,479	10,000	12,479
			Tactical wheeled vehicle development		[10,000]	
2040	0604633A	91	AIR TRAFFIC CONTROL	2,088		2,088
2040	0604641A	92	TACTICAL UNMANNED GROUND VEHICLE (TUGV)			

## Title II-RDT and E

(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0604642A	93	LIGHT TACTICAL WHEELED VEHICLES		15,000	15,000
			HMMVV block improvement program - initiate development		[15,000]	
2040	0604645A	94	ARMORED SYSTEMS MODERNIZATION (ASM)-SDD	2,700,455		2,700,455
2040	0604647A	95	NON-LINE OF SIGHT CANNON	497,643		497,643
2040	0604649A	96	ENGINEER MOBILITY EQUIPMENT DEVELOPMENT			
2040	0604710A	97	NIGHT VISION SYSTEMS - SDD	24,693		24,693
2040	0604713A	98	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	115,093	2,500	117,593
			Integrated battle space combat situational awareness system		[2,500]	
2040	0604715A	99	NON-SYSTEM TRAINING DEVICES - SDD	51,694		51,694
2040	0604716A	100	TERRAIN INFORMATION - SDD	3,199		3,199
2040	0604726A	101	INTEGRATED METEOROLOGICAL SUPPORT SYSTEM	2,485		2,485
2040	0604738A	102	JSIMS CORE PROGRAM			
2040	0604741A	103	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE - SDD	27,376		27,376
2040	0604742A	104	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	42,869		42,869
2040	0604746A	105	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	4,713	2,500	7,213
			Accelerate diagnostic and expert system development		[2,500]	
2040	0604760A	106	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS) - SDD	26,985		26,985
2040	0604766A	107	TACTICAL SURVEILLANCE SYSTEMS - SDD	21,821		21,821
2040	0604768A	108	ARMY TACTICAL MISSILE SYSTEM (ATACMS)	21	5,000	5,021
			Viper Strike		[5,000]	
2040	0604770A	109	JOINT SURVEILLANCE/TARGET ATTACK RADAR SYSTEM (JSTARS)			
2040	0604778A	110	POSITIONING SYSTEMS DEVELOPMENT (SPACE)	2,048		2,048
2040	0604780A	111	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	23,849		23,849
2040	0604783A	112	JOINT NETWORK MANAGEMENT SYSTEM	10,726		10,726
				144		

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Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0604801A	113	AVIATION - SDD	2,378		2,378
2040	0604802A	114	WEAPONS AND MUNITIONS - SDD	125,885	17,000	142,885
			APKWS - semi-active laser seeker production transition initiative		[7,000]	
			Precision guided mortar munitions - accelerate Block I		[10,000]	
2040	0604804A	115	LOGISTICS AND ENGINEER EQUIPMENT - SDD	89,151		89,151
2040	0604805A	116	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS - SDD	219,790		219,790
2040	0604807A	117	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT - SDD	11,727		11,727
2040	0604808A	118	LANDMINE WARFARE/BARRIER - SDD	51,045		51,045
2040	0604814A	119	ARTILLERY MUNITIONS	133,297		133,297
2040	0604817A	120	COMBAT IDENTIFICATION	6,994		6,994
2040	0604818A	121	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	68,110		68,110
2040	0604819A	122	LOSAT	22,628		22,628
2040	0604820A	123	RADAR DEVELOPMENT	6,107		6,107
2040	0604823A	124	FIREFINDER	18,516		18,516
2040	0604854A	125	ARTILLERY SYSTEMS	9,550		9,550
2040	0604865A	126	PATRIOT PAC-3 THEATER MISSILE DEFENSE ACQUISITION	64,178	-64,178	
			PAC-3 (transfer to 63869A, line 77)		[-64,178]	
2040	0605013A	127	INFORMATION TECHNOLOGY DEVELOPMENT	95,261		95,261
2040	0604256A	128	THREAT SIMULATOR DEVELOPMENT	22,101		22,101
2040	0604258A	129	TARGET SYSTEMS DEVELOPMENT	11,017		11,017
2040	0604759A	130	MAJOR T&E INVESTMENT	57,987		57,987
2040	0605103A	131	RAND ARROYO CENTER	20,012		20,012
2040	0605301A	132	ARMY KW/ALEIN ATOLL	143,921		143,921
2040	0605326A	133	CONCEPTS EXPERIMENTATION PROGRAM	22,727		22,727

**Title II-RDT and E**  
(Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2040	0605502A	134	SMALL BUSINESS INNOVATIVE RESEARCH	181,114		181,114
2040	0605601A	135	ARMY TEST RANGES AND FACILITIES	52,433		52,433
2040	0605602A	136	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	44,648		44,648
2040	0605604A	137	SURVIVABILITY/LETHALITY ANALYSIS	15,725		15,725
2040	0605605A	138	DOD HIGH ENERGY LASER TEST FACILITY	3,485		3,485
2040	0605606A	139	AIRCRAFT CERTIFICATION	8,711		8,711
2040	0605702A	140	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	18,000		18,000
2040	0605706A	141	MATERIEL SYSTEMS ANALYSIS	4,740		4,740
2040	0605709A	142	EXPLOITATION OF FOREIGN ITEMS	71,239		71,239
2040	0605712A	143	SUPPORT OF OPERATIONAL TESTING	62,209		62,209
2040	0605716A	144	ARMY EVALUATION CENTER	1,935		1,935
2040	0605718A	145	SIMULATION & MODELING FOR ACQ, RQTS, & TNG (SMART)	59,368		59,368
2040	0605801A	146	PROGRAMWIDE ACTIVITIES	27,713	3,000	30,713
2040	0605803A	147	TECHNICAL INFORMATION ACTIVITIES		[3,000]	
			Supercomputing research		500	
2040	0605805A	148	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	14,611		15,111
			Battle effects simulator			
2040	0605857A	149	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	4,527		4,527
2040	0605898A	150	MANAGEMENT HQ - R&D	11,575		11,575
2040	0909999A	151	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS			
2040	0102419A	152	JOINT LAND ATTACK CRUISE MISSILES DEFENSE (JLENS)	81,514		81,514
2040	0203610A	153	DOMESTIC PREPAREDNESS AGAINST WMD			
2040	0203726A	154	ADV FIELD ARTILLERY TACTICAL DATA SYSTEM	17,994		17,994
2040	0203735A	155	COMBAT VEHICLE IMPROVEMENT PROGRAMS	15,952		15,952



# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2040	0203740A	156	MANEUVER CONTROL SYSTEM	24,753		24,753
2040	0203744A	157	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	242,853		242,853
2040	0203752A	158	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	2,427	10,000	12,427
			Full Authority Control (FADEC) for armed reconnaissance Helicopters		[10,000]	
2040	0203758A	159	DIGITIZATION	24,506		24,506
2040	0203759A	160	FORCE XXI BATTLE COMMAND, BRIGADE AND BELOW (FBCB2)	23,510		23,510
2040	0203801A	161	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	31,690	5,000	36,690
			Advanced composite radome		[5,000]	
2040	0203802A	162	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	4,863		4,863
2040	0203806A	163	TRACTOR RUT	3,321		3,321
2040	0203808A	164	TRACTOR CARD	9,023		9,023
2040	0208010A	165	JOINT TACTICAL COMMUNICATIONS PROGRAM (TRI-TAC)	18,177		18,177
2040	0208053A	166	JOINT TACTICAL GROUND SYSTEM	9,967		9,967
2040	0301359A	167	SPECIAL ARMY PROGRAM	5,213		5,213
2040	0303028A	168	SECURITY AND INTELLIGENCE ACTIVITIES		16,000	16,000
			Document exploitation		[4,000]	
			Information Dominance Center		[8,000]	
			Pathfinder Data Analysis Tool		[4,000]	
2040	0303140A	169	INFORMATION SYSTEMS SECURITY PROGRAM	24,725		24,725
2040	0303141A	170	GLOBAL COMBAT SUPPORT SYSTEM	94,215		94,215
2040	0303142A	171	SATCOM GROUND ENVIRONMENT (SPACE)	51,959		51,959
2040	0303150A	172	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM	19,204		19,204
2040	0305114A	173	TRAFFIC CONTROL, APPROACH AND LANDING SYSTEM			
2040	0305204A	174	TACTICAL UNMANNED AERIAL VEHICLES (JMIP)	45,627		45,627

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
2040	0305206A	175	AIRBORNE RECONNAISSANCE SYSTEMS	5,128	6,200	11,328
			Longwave Imaging development		[6,200]	
2040	0305208A	176	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	43,254		43,254
2040	0702239A	177	MLRS PRODUCT IMPROVEMENT PROGRAM	97,422		97,422
2040	0702239A	178	AVIONICS COMPONENT IMPROVEMENT PROGRAM	997		997
2040	0708045A	179	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	67,236	8,500	75,736
			Packaging and interconnection technology		[3,000]	
			Virtual parts program		[3,000]	
			Lean manufacturing system demonstrations		[2,500]	
2040	1001018A	180	NATO JOINT STARS	595		595
2040	XXXXXX	180A	Army Aviation Test Bed		48,000	48,000
			Financial information systems		-18,200	-18,200
			<b>Total, RDT&amp;E Army</b>	<b>9,266,258</b>	<b>420,700</b>	<b>9,686,958</b>

### **Army basic research**

The budget request included \$131.3 million in PE 61102A for defense research sciences. The committee notes that past investments in basic research at universities and in industry developed the technologies which are being used in current operations, including the Global Positioning System (GPS), computer networks, and body armor. The committee recommends an increase in PE 61102A of \$11.5 million for this fundamental science, which promotes advances in all aspects of Army research. Of this amount, the committee recommends an increase of \$2.5 million for predictive modeling and information analysis of desert terrains in support of military operations; \$2.0 million for reactive surface technology; \$2.0 million to support research on unique performance issues facing military vehicles in low temperature environments; \$2.0 million for advanced deployable sensors to develop remote target recognition and identification capabilities; and \$3.0 million for long-term backplane electronics technology research and infrastructure development for flexible displays. The basic research program is conducted in support of the larger consortium on flexible displays geared toward a U.S. based manufacturing capability.

### **Army university research**

The budget request included \$75.1 million in PE 61103A for the University Research Initiative (URI) program. The URI program provides key support and equipment to the academic community working in support of defense missions. Additional resources focused on emerging needs would yield tools useful to address new challenges on changing battlefields. The committee recommends an increase in PE 61103A of \$2.0 million for antiterrorism building and construction in support of the Department's comprehensive approach to force protection.

### **University industry research centers**

The budget request included \$77.7 million in PE 61104A for the Army's University and Industry Research Centers. A significant portion of the work performed within this program directly supports future force requirements. To further research aimed at enabling technologies for future force capabilities, the committee recommends an increase of \$6.0 million in PE 61104A: \$2.0 million for nanocomposite materials research for use in optical devices and for stealth coatings; \$2.5 million for ferroelectric nanodevice development for secure communications and rapid information gathering; and \$1.5 million for information assurance research in areas of insider threat mitigation, wireless and sensor network security, secure distributed computing, user interface design for secure applications, and information assurance education standards.

### **Army materials technology**

The budget request included \$15.4 million in PE 62105A for materials technology. To enhance survivability and lethality of Future Combat Systems, the committee recommends an increase in PE 62105A of \$7.5 million: \$2.5 million for Army mine detection and blast mitigation research; \$2.0 million for affordable multi-utility materials, and \$3.0 million for advanced materials processing.

### **Army persistent surveillance**

The budget request included \$25.6 million in PE 62120A for sensors and electronic survivability. The committee recommends an increase in PE 62120A of \$1.5 million to accelerate the development of a small airship surveillance system to address the Army's challenge in the area of long-term remote detection capabilities. Research on the small airship configuration would yield a stable, unobtrusive, platform capable of persistent, 360-degree, airborne surveillance for stationary and near-stationary targets. Research on this program would also develop integration of propulsion systems, electro-optical and forward-looking infrared radar camera systems, and integrated command and control systems and workstation software.

### **Silver Fox unmanned aerial vehicle**

The budget request included \$98.8 million in PE 62114N for power projection applied research and \$41.6 million in PE 62211A for aviation technology. The committee recommends an increase in PE 62114N of \$5.0 million and in PE 62211A of \$5.0 million for accelerated development of the Silver Fox unmanned aerial vehicle. The small Silver Fox configuration is launchable from a Navy ship and will assist with missions such as downed pilot search and rescue, sub detection, and marine mammal detection efforts. The project will be adapted for the Army to provide tactical support for ground troops and special operations forces.

### **Missile technology**

The budget request included \$60.0 million in PE 62303A for missile technology. Critical component technologies necessary to improve present and future missile performance have been developed and demonstrated. The Army must obtain flight test data on these component technologies to evaluate their flight performance and to confirm the validity of analysis techniques used to predict component performance over the range of required mission scenarios. The committee recommends an increase in PE 62303A of \$2.0 million for an Army multicomponent flight test.

The committee further recommends an increase in PE 62303A of \$2.0 million for hypersonic engine research and \$2.0 million for air defense science focused on countering the threat of rockets, artillery and mortar projectiles after launch. Technologies developed and demonstrated will enable stationary and mobile 360 degree extended protection, while minimizing cost, weight, and space requirements.

### **Advanced weapons technology**

The budget request included \$16.6 million in PE 62307A for advanced weapons technology. The committee recommends an increase in PE 62307A of \$2.0 million to accelerate development, delivery, integration, and testing of a new rapid target acquisition and tracking system for rockets, mortar and artillery. The new system will employ larger optics with higher angle resolution, and will utilize new software that is capable of accurately evaluating target trajectory in real time for weapons launch positions.

### **Advanced concepts and simulation**

The budget request included \$15.4 million in PE 62308A for advanced concepts and simulation. Unmanned systems currently support the warfighter in many ways from surveillance to combat missions. These systems and capabilities also represent a large untapped potential. Many autonomous systems have not advanced to the point of meaningful military application due, in part, to an incomplete science of testing unmanned systems, inaccessibility to dedicated standard testing facilities and limited compatibility between various aerial and ground systems. The committee recommends an increase of \$6.8 million in PE 62308A to support a joint unmanned systems testing and evaluation course.

To further overall Army advanced concepts and simulation efforts, the committee recommends an increase in PE 62308A of \$2.0 million for photonics research and \$2.5 million for advanced modeling and simulation.

### **Combat vehicle and automotive research**

The budget request included \$69.6 million in PE 62601A for applied research on combat vehicles and automotive technologies. The committee notes that this research is designed to develop leap-ahead armor, propulsion, and other automotive technologies to support the development of Future Combat Systems (FCS). The committee recommends an increase in PE 62601A of \$2.0 million for technologies for the rapid prototyping of vehicle parts; \$2.0 million for the development of lightweight, rechargeable batteries for FCS; \$2.5 million for technologies for the development of control, vision, and navigation systems for future robotic ground vehicles; \$3.0 million for advanced engineering research and manufacturing technologies for next generation vehicles; \$3.0 million for advanced electric drives; and \$3.0 million for phase two completion of the JP-8 plant. The flexible capability of the JP-8 plant will provide the U.S. military with a higher performing, versatile, ultra-clean single battlefield fuel, greatly reducing fuel logistics required for forward deployed forces.

### **Weapons and munitions technology**

The budget request included \$44.7 million in PE 62624A for weapons and munitions technology, designed to increase system lethality and survivability with the potential for better affordability, lower weight, and reduced size. To meet pressing needs in the areas of advanced armor and coatings, the committee recommends an increase in PE 62624A of \$3.0 million for a systematic development approach to more effective lightweight ceramic armor and \$4.0 million for active coating technology to produce cost-effective maintenance and camouflage protection options under various conditions. The Army continues to pursue development of new cannon systems for Future Combat Systems. The committee recommends an increase of \$2.0 million to support research on development of new gun recoil mitigation technologies.

### **Electronics and electronic devices**

The budget request included \$41.2 million in PE 62705A for electronics and electronic devices. The committee recommends in-

creases in PE 62705A of \$8.0 million for flexible display technologies to support the Army's future force and \$3.0 million for software-defined radio research to ensure communications interoperability and service during emergencies.

#### **Countermines systems**

The budget request included \$20.5 million in PE 62712A for countermines systems. The committee recommends an increase in PE 62712A of \$4.0 million for polymer-based landmine detection systems. This technology provides for detection of explosive compounds in landmine and improvised explosive devices through chemical vapor sensing using amplifying fluorescent polymers.

#### **Geosciences and atmospheric research**

The budget request included \$47.2 million in PE 62784A for military engineering technology in support of special requirements for battlefield visualization, including impacts of weather, terrain, and atmospheric obstacles on military equipment and operations. The committee recommends an increase in PE 62784A of \$3.0 million for geoscience and atmospheric research to assist in meeting the Army's battlespace awareness goals and to provide prediction capabilities on agent dispersion and other phenomena.

#### **Advanced composites for the warfighter**

The budget request included \$21.1 million in PE 62786A for warfighter technology. The use of advanced composites and materials has the potential to serve the Army's transformational goals in many ways. New composite materials applied to body armor and protective gear produce equipment that is higher strength with reduced weight. The new equipment has increased durability and is functionally integrated to include properties to counter ballistic, chemical, and biological threats. Composite research in the area of structures leads to increased construction and deployment speeds. The committee recommends an increase in PE 62786A of \$14.5 million: \$3.0 million for advanced construction structures and composites to support the Army's evolution into the future force; \$7.0 million for supplemental body armor; \$2.5 million for research on next generation chemical and biological agent protection garments; and \$2.0 million for research into embedding communications systems in combat suits.

#### **Amputee care and medical technology**

The budget request included \$60.9 million in PE 62787A for Army medical technology research. Today's combat operations are witnessing a surge in combat injuries involving amputation of major limbs. As of March 30, 2004, 92 military personnel had lost one or more limbs as a direct result of injuries sustained in Operation Iraqi Freedom and Operation Enduring Freedom. Eighty military amputees and one civilian have been cared for at the military amputee patient care program at Walter Reed Army Medical Center. Medical technology is rapidly developing to assist in the rehabilitation of amputees. Amputations caused by blast injuries present a more complex wounding pattern than amputations resulting from disease or other trauma. The committee believes that

more research is needed in this area, and that a military amputee patient care program is ideally suited to initiate and manage a program of intramural and extramural research in support of advancing amputee technology. Accordingly, the committee recommends an increase in PE 62787A of \$8.7 million to pursue research specific to combat injuries resulting in amputations.

Quality medical care for U.S. soldiers on the battlefield and after combat remains a critical focus for the Army. Advances in technology to stop blood loss are already saving lives. Research into alternatives to successful human plasma-based fibrogen bandages would reduce the cost of this treatment and ensure it is readily available when needed. The committee recommends an increase in PE 62787A of \$4.5 million for protein-based fibrogen bandage development.

Additional basic research on post traumatic stress and development of predictive tools that anticipate response to trauma using genetics, proteomics, and other biological and physical measures will assist in early assessment of conditions arising after deployments. The committee recommends an increase in PE 62787A of \$2.0 million for post traumatic stress disorder research.

In light of concerns about the potential use of biological weapons, the committee recognizes the need to improve the understanding of genes and proteins produced by the anthrax bacterium and the human response to anthrax. The committee recommends an increase in PE 62787A of \$3.0 million for the U.S. Army Medical Research Institute of Infectious Diseases to conduct enhanced anthrax research.

### **Medical research and technologies**

The budget request included \$60.9 million in PE 62787A for applied research on medical technologies. The budget request included \$38.4 million in PE 63002A for medical advanced technology development. The committee notes that medical research of unique application to injuries and ailments resulting from service in the military is of great importance. The committee is concerned that medical programs not of clear and specific concern to the military are not well coordinated between the Department of Defense and other federal agencies pursuing health missions with substantial research budgets. The committee recommends a reduction in PE 62787A of \$5.0 million and a reduction in PE 63002A of \$5.0 million for growth in nondefense medical research, and encourages a focus on unique military health problems and battlefield medicine.

### **Technology and human systems integration**

The budget request included \$68.0 million in PE 63001A for warfighter advanced technology. The committee recommends an increase in PE 63001A of \$2.0 million for integration of technology and human systems to ensure new protection equipment and sensor components are configured for human operation.

### **Medical advanced technology**

The budget request included \$38.4 million in PE 63002A for medical advanced technology. Military medical research and combat casualty care programs continue to evolve and progress. Additional

resources in targeted projects will accelerate capabilities nearing application. The committee recommends an increase in PE 63002A of \$14.4 million: \$4.0 million for elastin biomatrices research designed to repair blood vessels and tissue to save limbs; \$2.0 million for a scalable, continuous, automatic monitoring, tracking and location system for medical records; \$3.0 million for decontamination and disinfection of injuries exposed to biological agents; \$3.0 million for electronic textiles; \$1.0 million for accelerated diagnosis through digital imaging pattern recognition; and \$1.4 million for research into field treatments for leishmaniasis, which is the skin ailment resulting from parasitic sand flies in Iraq.

#### **Unmanned tactical combat vehicles**

The budget request included \$69.5 million in PE 63003A for advanced aviation technology and \$58.0 million in PE 63640M for Marine Corps advanced technology demonstrations. The committee is aware of the near-term requirement for a cost-effective, survivable, tactical unmanned combat aerial vehicle (UCAV) that can reach conflict areas in a timely manner, engage and destroy targets of opportunity, provide overhead coverage at trouble spots, such as roadside ambushes, and operate without runways or launch mechanisms. The committee believes that the development of a survivable vertical takeoff and landing (VTOL) tactical-class combat air vehicle will cost-effectively introduce self-contained rapid response precision strike capability to the tactical commander. The committee recommends an increase in PE 63003A of \$8.0 million and in PE 63640M of \$1.0 million to address this requirement through development and concept of operations for the a tactical UCAV demonstrator.

#### **Advanced penetrator munitions**

The budget request included \$67.6 million in PE 63004A for weapons munitions advanced technology. In order to explore environmentally benign alternatives to depleted uranium deep penetrators and for use on training firing ranges, the committee recommends an increase in PE 63004A of \$2.0 million for small caliber advanced penetrator munitions.

#### **Combat vehicle and automotive advanced technology**

The budget request included \$203.1 million in PE 63005A for combat vehicle and automotive advanced technology. The committee recommends an increase in PE 63005A of \$36.2 for the development of automotive technologies that would support the transformation of the Army into a lighter, more lethal force, and would contribute to the development of the Future Combat Systems (FCS). Specifically, the committee recommends an additional \$3.5 million for the development of next generation non-tactical vehicle propulsion systems; \$6.1 million for the demonstration of fuel cell ground support equipment; \$2.0 million for research on the design of future Army tactical vehicles; \$3.5 million for the development of vehicle thermal management control systems; \$2.0 million for research on fastener and joining technologies; \$4.0 million for the development of armored composite cab materials; \$4.0 million for electrochromic materials research to develop smart windows; \$3.0



million for advanced titanium armor systems; \$1.5 million for FCS common chassis design; \$3.0 million for non-line of sight cannon structure design; and \$3.6 million for the Army's unfunded opportunity in the area of kinetic energy active protection systems and countermeasures for the FCS.

### **Coordinated training**

The budget request included \$7.3 million in PE 63007A for manpower, personnel and training advanced technology. The Army is working to ensure that the "human component" of warfighting keeps pace with the transformation in systems, weapons, equipment, and requirements. Development of more effective collective training methods is a key goal of this effort. The committee recommends an increase of \$3.0 million in PE 63007A for coordinated training.

### **Electronic warfare advanced technology**

The budget request included \$41.8 million in PE 63008A for electronic warfare advanced technology. The committee recommends increases in PE 63008A of \$2.0 million for a high altitude intercept platform for image processing and target recognition and classification; \$2.0 million for a networking environment for command, control, communications, and mobile services; and \$3.0 million for the portable and mobile emergency response broadband system. These project increases would explore developments in advanced antenna technology, advanced battery technology, alternative frequency technology, and extended range and wearable configuration capabilities designed to increase persistent, secure communications and battlespace awareness.

### **Next generation training and simulation systems**

The budget request included \$18.1 million in PE 63015A for next generation training and simulation systems. The committee commends the Army for its innovative approach to highly immersive training and simulation through the creation of the Institute for Creative Technologies, and recommends increases in PE 63015A of \$3.0 million for automatic virtual environment research and \$2.5 million for the continued development of interactive test and evaluation simulators to support training and mission rehearsal exercises.

### **Explosives demilitarization technology**

The budget request included \$9.7 million in PE 63103A for explosives demilitarization technology. The Army has implemented a comprehensive strategic plan—integrated through the leadership of the Joint Ordnance Commanders Demilitarization Subgroup—for demilitarization of approximately 400,000 tons of material requiring disposition. The committee recommends an increase in PE 63103A of \$2.0 million for demilitarization of obsolete munitions using a promising new approach—the actodemil process—which recycles nitrogen containing energetic components into fertilizer and has been validated by the Joint Demilitarization Technology program. The committee further recommends an increase in PE

63103A of \$2.0 million for advancement of missile recycling capabilities.

#### **Close-in active protection**

The budget request included \$92.8 million in PE 63313A, for missile and rocket advanced technology, but no funding for the Close-in Active Protection System (CIAPS), which consists of an omni-directional radar that can detect an incoming threat at very short-range and launch prepositioned interceptors to destroy the threat before it hits the protected vehicle. On March 3, 2004, the Deputy Commanding General, U.S. Army Research, Development and Engineering Command, System of Systems Integration, testified that the CIAPS is effective against anti-tank guided missiles, as well as rocket-propelled grenades. The committee supports continued development of this technology, and recommends an increase of \$7.5 million for CIAPS, for a total authorization of \$100.3 million in PE 63313A.

#### **Cost effective targeting system**

The budget request included \$50.1 million in PE 63710A for night vision advanced technology, but no funding for the cost effective targeting system (CETS). The CETS autonomously searches for targets and threats and presents only targets with high probability to the operator, either at a remote location for unmanned platforms or directly to the operator on manned platforms. The committee believes that a demonstration may provide insights into future application on Stryker combat vehicles. The committee recommends an increase of \$4.8 million in PE 63710A for CETS, for a total authorization of \$54.9 million.

#### **Advanced mobile micro grid technology**

The budget request included \$3.9 million in PE 63734A for military engineering advanced technology. The committee recommends an increase in PE 63734A of \$6.2 million for development and demonstration of a micro power grid capability to quickly provide transportable and scalable blocks of electric power to deployed forces. The committee notes that a mobile power generation and transmission capability has the advantage of providing the Department of Defense with packaged, transportable energy that could be moved anywhere in the world to support the deployment of military forces.

#### **Advanced visualization tools**

The budget request included \$53.5 million in PE 63305A for missile defense systems integration, but no funding for advanced visualization tools.

The committee notes that the Missile Defense Agency is developing a single ballistic missile defense system that will integrate the capabilities of various sensors, interceptors, and battle management components. The committee recognizes the importance to that enterprise of advanced tools to provide commanders with a common picture of the battlespace. Advanced visualization tools that can accept data from various sources and assimilate the data into a common operational and tactical picture will be essential to effective

command and control for missile defense and other military missions. Such tools also enhance training, mission planning, and mission rehearsal.

The committee recommends an increase of \$3.0 million in PE 63305A for continued development of battle space visualization tools.

#### **Interactive modeling and simulation management**

The budget request included \$53.5 million in PE 63305A for missile defense systems integration, but no funding for interactive modeling and simulation management capability.

The committee notes that effective modeling and simulation is essential to the development of missile defenses and other military capabilities. Although verification and validation of modeling and simulation tools are required, the committee understands that there is no formal process to coordinate or manage the activities needed for such verification and validation.

The committee recommends an increase of \$3.0 million in PE 63305A for development of technologies and processes to support verification and validation of modeling and simulation.

#### **Integrated composite missile structures**

The budget request included \$53.5 million in PE 63305A for missile defense systems integration, but no funding for integrated composite missile structures.

Current missile airframes are complex multi-tiered structures consisting of a heatshield, a bondline, and a substructure that can potentially limit missile performance because of inherent limits in thermal protection, structural integrity, and electromagnetic shielding properties. The committee believes, based on prior research and development efforts, that integrated composite missile structures have the potential to reduce cost and weight while significantly enhancing missile performance, including increased range and better thermal protection. These prior efforts also suggest that manufacturing such complex composite structures is feasible. The improved performance offered by such structures could be valuable for a variety of military applications, including missile defense.

Therefore, the committee recommends an increase of \$7.0 million in PE 63305A to demonstrate the feasibility of manufacturing integrated composite missile structures.

#### **Mobile tactical high energy laser**

The budget request included \$53.5 million in PE 63305A for missile defense systems integration, of which \$38.5 million is for the development of the mobile tactical high energy laser (MTHL).

The committee believes that directed energy weapons could play an important role in future air and missile defense systems. MTHL is an effort to develop, in cooperation with the Israeli Ministry of Defense, a mobile high energy gas laser to destroy short-range rockets and artillery shells in flight. The committee supports this effort. The program is a follow-on to the tactical high energy laser (THEL) advanced concept technology demonstration, which successfully destroyed short-range rockets in flight from a fixed site.

The committee notes that the use of a gas laser will require transport of volatile chemical fuels with the operational laser system. The committee is aware of very successful tests of a solid state heat capacity laser and recent fabrication advances that will contribute to the development of a 100 kilowatt variant of this laser. The committee recognizes that solid state lasers have several advantages over gas lasers related to compactness and logistics support. The committee believes that solid state laser technology is sufficiently mature to warrant an effort to accelerate development of a 100 kilowatt solid state laser and an integrated system demonstration of this laser as part of the MTHEL effort.

The committee recommends an increase of \$15.0 million in PE 63305A for continued development of the MTHEL and integration of solid state laser technology into the MTHEL effort.

#### **Remote sensor monitoring technology research program**

The budget request included \$53.5 million in PE 63305A for research and development related to Army defense systems integration, but no funding for the remote sensor monitoring technology program.

The committee believes that the development of miniature, high brightness, tunable, multicolor lasers for radiation detection could improve the capability to detect materials in so-called "dirty bombs" and clandestine nuclear production facilities. Current single color lasers do not have the necessary standoff capability.

The committee recommends an increase of \$3.0 million in PE 63305A to develop miniature, high brightness, tunable, multicolor lasers for radiation detection.

#### **Adaptive integrated fire control**

The budget request included \$91.7 million in PE 63327A for air and missile defense systems engineering, but no funding for adaptive integrated fire control.

The committee recommends an increase of \$2.0 million in PE 63327A for adaptive integrated fire control.

#### **Enhanced area air defense system short-range integrated kinetic energy system**

The budget request included \$91.7 million in PE 63327A for air and missile defense systems engineering, but no funding for the enhanced area air defense system (EAADS) short-range integrated kinetic energy (E-STRIKE) system.

The committee recognizes the serious threat to deployed U.S. forces posed by mortars, artillery, and short-range rockets, and the near-term need to counter these threats. The short flight time and small target size will require enhanced radar and fire control capabilities and technical innovation to meet those more stringent requirements. The committee believes that additional funding is needed to support system of system concept development, risk reduction, and technical assessments to achieve timely deployment of E-STRIKE radar and missile technologies.

The committee recommends an increase of \$10.0 million in PE 63327A for E-STRIKE research and development.

### **Manganese Health Research Program**

The budget request included \$9.4 million in PE 63779A for environmental quality technology. The committee recommends an increase of \$4.6 million in PE 63779A for the Manganese Health Research Program (MNRP). The committee supports the development of better ways to protect the health of those exposed to manganese through their work or in the environment. The military departments are significant customers of manganese. Manganese is a component of coated welding rods and various steel alloys. The committee notes that MNRP consists of a unique partnership of the U.S. government, domestic and international industry, and academic researchers, seeking to reduce the adverse health effects that can be caused by certain exposures to manganese.

### **120mm mortar advanced development**

The budget request included \$2.4 million in PE 63802A for weapons and munitions advanced development, but no funding for the 120mm mortar advanced development, the replacement for the current family of 120mm mortar. The committee notes that the Future Combat Systems has a requirement for an extended range munition for the Non-Line of Sight Mortar. The committee recommends an increase of \$2.0 million in PE 63802A for the advanced development of a 120mm mortar, for a total authorization of \$4.4 million.

### **Mobile parts hospital**

The budget request included \$10.5 million in PE 63804A for logistics and engineer support equipment, but no funding for the mobile parts hospital (MPH), a self-contained, self-sustaining mobile mini-manufacturing center that can produce spare parts near the point of need. The committee notes that MPH has begun manufacturing vehicle parts at Camp Arifjan, Kuwait, in support of Operation Iraqi Freedom. The committee recommends an increase of \$6.0 million for continuing the MPH development, for a total authorization of \$16.5 million in PE 63804A.

### **Advanced crew served weapon**

The budget request included \$28.2 million in PE 64601A, for the development of the XM-307 advanced crew served weapon, but included no funds for the continued development of the XM-312, a variant of the XM-307. The XM-307 advanced crew served weapon system is the next generation replacement for the heavy grenade machine guns. The XM-312 is the .50 caliber variant of the XM-307.

The committee notes that the XM-307 advanced crew served weapon requirement was approved as part of the Future Combat Systems (FCS) Operational Requirements Document, dated April 4, 2003. The committee understands that the FCS lethality integrated product team has recommended the XM-307 as either the primary or secondary armament solution for nine of the manned and unmanned ground vehicles of FCS.

The committee notes that the XM-312 variant fires all existing .50 caliber ammunition, including the M903 sabot light armor-penetrating round. The committee understands that the XM-312

.50 caliber variant of the XM-307 is required as a development and integration tool to reduce test costs and prototype development.

The committee recommends an increase of \$8.5 million for the continued development of the XM-307 crew served weapon and an increase of \$4.0 million for the product improvement and integration costs for the XM-312 .50 caliber machine gun, for a total authorization of \$40.7 million in PE 64601A.

#### **Family of medium tactical vehicles evolution**

The budget request included \$2.9 million in PE 64604A, for medium tactical vehicle development, but did not include funding for the next generation of the family of medium tactical vehicles (FMTV). Lessons learned from Operation Iraqi Freedom indicate that the medium tactical vehicle fleet will require improvements in survivability and range, and will require a payload movement tracking system capability in order to support Future Combat Systems (FCS). The committee notes that the Army is in the second year of a five year FMTV competitive rebuy contract. The committee believes that the Army should include FCS technologies in the next iteration of FMTV to enable the FMTV fleet to keep pace with the future force both in technical power and network capability. The committee recommends an increase of \$3.0 million in PE 64604A for the development of the next generation of FMTV, for a total authorization of \$5.9 million.

#### **Tactical wheeled vehicle development**

The budget request included \$2.5 million in PE 64622A, for a family of heavy tactical vehicles, but no funding for tactical wheeled vehicle development. The committee notes that the Army proposed the Future Tactical Truck System (FTTS) program to develop and demonstrate advanced wheeled vehicles and supporting technologies as a candidate for the Advanced Concept Technology Development (ACTD) program. In the summer of 2003, the Department of Defense approved the FTTS ACTD for fiscal year 2004 execution. This ACTD is supportive of the Army's Tactical Wheeled Vehicle (TWV) strategy. The committee notes that the Army programmed funds in the Future Years Defense Program to mature component technologies to enable timely and rapid delivery of supplies to Future Combat Systems units of action as a component of the FTTS ACTD. The committee recommends an increase of \$10.0 million to accelerate TWV development in coordination with the FTTS ACTD, for a total authorization of \$12.5 million in PE 64622A.

#### **High mobility multi-purpose wheeled vehicle block improvement**

The budget request included no funding in PE 64642A, for light tactical vehicles. Fiscal year 2004 funding completes the high mobility multi-purpose wheeled vehicle (HMMWV) modernization effort. The Army intends to initiate a HMMWV block improvement program in fiscal year 2007. The HMMWVs are being used extensively in Operation Enduring Freedom and Operation Iraqi Freedom. The committee believes that a block change and improvement program should be started in fiscal year 2005 to enable the Army

to insert emerging technologies into existing vehicles or those in production to meet Army objectives for improved reliability, range, repairability, and survivability. The committee recommends an increase of \$15.0 million for initiation of a block improvement program for the HMMWV, for a total authorization of \$15.0 million in PE 64642A.

#### **Integrated battlespace combat situational awareness system**

The budget request included \$115.1 million in PE 64713A, including \$91.3 million for land warrior (LW) development, but no funding for the integrated battlespace combat situational awareness system (IB-CSAS), a system that identifies friend from foe. The committee notes that funding is required to continue the developmental work conducted in fiscal years 2003 and 2004, to provide situational awareness, training capabilities and associated technologies. The committee recommends an increase of \$2.5 million to continue IB-CSAS development, for a total authorization of \$117.6 million in PE 64713A.

#### **Automatic test equipment development**

The budget request included \$4.7 million in PE 64746A, for automatic test equipment development, including \$3.8 million for development of the Next Generation Automatic Test System, Base Shop Test Facility (BSTF)(V)6, which provides state-of-the-art testing of digital, hybrid, and radio frequency electronics. The committee notes that the Army needs to improve test and diagnostic capabilities as digital equipment is introduced into Army equipment. The committee recommends an increase of \$2.5 million in PE 64746A, for automated test equipment, for a total authorization of \$7.2 million.

#### **Viper Strike**

The budget request included \$21,000 in PE 64768A for the development of brilliant anti-armor submunitions, but no funding for the continued development of the Viper Strike munition, an unmanned aerial vehicle (UAV) precision munition. The Army has demonstrated that the Viper Strike munition provides pin-point accuracy against moving and stationary targets. The committee understands that on March 8, 2004, the Army Deputy Chief of Staff for Operations, at the request of the Commander, Joint Task Force 7, validated the operational requirement for weaponization of the Hunter UAV with Viper Strike munitions in support of Operation Iraqi Freedom. The committee believes that this capability should be accelerated for fielding to the combatant commanders, as soon as feasible. The committee recommends an increase of \$5.0 million for the conversion of 70 munitions to the Viper Strike configuration, for a total authorization of \$5.0 million in PE 64768A.

#### **Advanced precision kill weapon system**

The budget request included \$125.9 million in PE 64802A, for weapons and munitions engineering development, including \$12.5 million for the advanced precision kill weapon system (APKWS) and \$14.7 million for the precision-guided mortar munition (PGMM). The APKWS and PGMM will provide the warfighter with

increased lethality due to the munitions precision targeting capability of these systems.

The APKWS is a highly accurate, low-cost weapon system. The committee understands the Army is developing a distributed semi-active laser seeker for APKWS. The PGMM is a laser guided mortar munition designed to defeat high pay-off targets. The committee notes that the Army is in the middle of the systems development and demonstration phase of the PGMM program. The PGMM is identified as a required capability in the Future Combat Systems Operational Requirements Document. The committee believes that the Army should accelerate these capabilities. The committee recommends an increase of \$7.0 million for the continued development of the distributed aperture semi-active laser seeker for APKWS, and \$10.0 million for accelerating PGMM development, for a total authorization of \$142.9 million in PE 64802A.

#### **Supercomputing research**

The budget request included \$27.7 million in PE 65803A for technical information activities. The committee recommends an increase in PE 65803A of \$3.0 million for supercomputing research, which would support pressing needs for rapid simulation and analysis of alternative designs for armor, blast resistant materials, weapons to defeat specialized bunkers, and dispersion models.

#### **Munitions standardization, effectiveness and safety**

The budget request included \$14.6 million in PE 65805A for munitions standardization, effectiveness and safety. The Army is exploring a series of new simulators that can provide realistic battle-condition training. The committee recommends an increase in PE 65805A of \$0.5 million to certify safety of enhanced battle effects simulators that have improved artillery, mortar, anti-aircraft, and small arms fire capabilities.

#### **Full authority digital engine control**

The budget request included \$2.4 million in PE 23752A, for the aircraft engine component improvement program, but no funding for the continued development of full authority digital engine control (FADEC). The FADEC reduces procurement costs, improves engine capability, and increases pilot safety by reducing pilot workload. The committee believes that FADEC should be applied now to the Kiowa Warrior helicopter and to the future light armed reconnaissance aircraft once requirements are identified and validated through the Joint Requirements Oversight Council process. The committee recommends an increase of \$10.0 million for the development of the FADEC, for a total authorization of \$12.4 million in PE 23752A.

#### **Conceptual analysis tools**

The budget request included \$1.6 million in Research, Development, Test and Evaluation, Army, Security and Intelligence Activities, for continued development of the Pathfinder data analysis system.

The Pathfinder program was a groundbreaking initiative in the early 1990's that recognized the need for automated tools to help



analysts sort through large amounts of data quickly to find important, related pieces of information. Pathfinder has been a useful automation tool for intelligence analysis, but because of the nature of automation and software, the program requires constant upgrading and developmental work. Additional work is required to enable Pathfinder to function in conjunction with overall intelligence architecture standards in a networked, web-based environment, to support direct access and rapid visualization of knowledge by analysts.

The committee recommends an increase of \$4.0 million in PE 33028A, for the continued development of conceptual analysis tools for the Pathfinder program.

### **Document exploitation**

The budget request included no funding for Research, Development, Test and Evaluation, Army, Security and Intelligence Activities, for development of advanced document exploitation equipment.

Portable, rugged document exploitation equipment is currently not widely available to military personnel operating in deployed, austere environments. The technology exists to develop lightweight equipment that can scan documents, quickly search for important information in native languages and transmit potentially valuable documents back to exploitation facilities immediately, thus providing battlefield commanders with rapid exploitation of captured information. Recent experiences in Afghanistan and Iraq have demonstrated the value of such capabilities and the requirement for additional, improved capabilities.

The committee recommends an increase of \$4.0 million in PE 33028A, to continue development, product improvement, and fielding of portable document exploitation systems.

### **Information Dominance Center**

The Information Dominance Center (IDC) of the U.S. Army Intelligence and Security Command continues to conduct important operational and developmental work in the field of all-source analysis. A key aspect of this work is the development, testing, and use of state-of-the-art data mining and knowledge management tools that enable analysts to quickly sort through thousands of bits of data and recognize trends and relationships in disparate pieces of information. The IDC is well-funded in current budget allocations, and is projected to maintain satisfactory funding levels in the fiscal year 2005 budget request and Future Years Defense Program.

A critical aspect of achieving and sustaining information dominance is the availability of multiple databases and a reliable automation architecture. As the IDC concept matures and access to these analytical tools migrates to field locations around the world, the availability of databases and processing architectures must be maintained. These systems are subject to loss or inaccessibility caused by a variety of circumstances, including direct attack, cyber-attack, or acts of nature. To ensure continuity of operations and maintenance of information dominance, redundant databases and processing architectures are essential.

The committee recommends an increase of \$8.0 million in PE 33028A, to establish redundant databases and processing architectures for the IDC.

#### **Airborne reconnaissance systems**

The budget request included \$5.1 million in PE 35206A for airborne reconnaissance systems but included no funding for longwave imaging. Lessons learned for Operation Iraqi Freedom indicates that the Army requires technology that provides a capability to readily identify camouflaged or decoy targets, chemical agents, or buried improvised explosive devices (IED). The committee believes that the development of this capability using longwave imaging technology has the potential to result in an effective IED detection system. The committee recommends an increase of \$6.2 million for longwave imaging technology development, for a total authorization of \$11.3 million in PE 35206A.

#### **Army parts and packaging systems**

The budget request included \$67.2 million in PE 78045A for End Item Industrial Preparedness Activities. Dealing with logistical and spare parts deficiencies, especially for legacy systems, is a manpower and resource drain for the Army, particularly in emergency conditions and during deployments. A virtual engineering environment has been explored that demonstrates a methodology for integration of digitized technical data, modeling, verification, and electronic transfer. The advanced virtual engineering environment produced by this project will assist the Army in meeting the need for parts for systems now out of production and for low-cost design of new components. The committee recommends an increase in PE 78045A of \$3.0 million to support the virtual parts program; \$3.0 million for new packaging and interconnection platforms to meet production needs for emerging composite materials and structures; and \$2.5 million for lean manufacturing system demonstrations.

#### **Advanced aviation technology test bed**

While the committee supports the Army's decision to terminate the Comanche helicopter program, the committee believes that the technologies developed with the \$6.9 billion expended during Comanche development must be made available for existing and future helicopter programs. The committee is concerned that the Army has not developed and funded a comprehensive program to retain Comanche-unique technologies, including the associated scientists, engineers, and laboratories. The committee notes that the Army has provided material to this committee that indicates the Army's plan to begin development of the Joint Multi-role Helicopter in fiscal year 2008.

The committee directs the Army to create an advanced aviation technology test bed to transfer technologies from the Comanche program to other existing and future platforms. In developing this test bed, the Army should ensure that significant portions of Comanche tools, processes, facilities, labs, and key personnel be retained for the test bed to support transfer of Comanche technologies to other programs. The committee further directs the Army to submit its plan for the advanced aviation technology test

bed, including those technologies most likely for transfer and proposed for Future Years Defense Program funding, to the congressional defense committees not later than March 31, 2005. The committee recommends \$48.0 million in a program element identified by the Army with the submission of the fiscal year 2006 President's budget request, for the advanced aviation technology test bed.

### **Navy**

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0601103N	1	RESEARCH, DEVELOPMENT, TEST & EVALUATION, NAVY UNIVERSITY RESEARCH INITIATIVES	83,508	17,000	100,508
			Nanoscience research		[3,000]	
			Nanoparticle materials research		[1,500]	
			Remote sensing research		[1,000]	
			Corrosion research		[5,000]	
			Neural engineering research		[1,500]	
			Multifunctional materials for naval structures		[5,000]	
1319	0601152N	2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	17,664	2,500	20,164
			Navy S&T outreach		[2,500]	
1319	0601153N	3	DEFENSE RESEARCH SCIENCES	375,812	5,000	375,812
1319	0602114N	4	POWER PROJECTION APPLIED RESEARCH	98,831		103,831
			Silver Fox		[5,000]	
1319	0602123N	5	FORCE PROTECTION APPLIED RESEARCH	96,269	15,000	111,269
			Hyperspectral data fusion		[4,000]	
			Unmanned systems battery development		[3,000]	
			Structural reliability composite research		[1,000]	
			Fire retardant resins		[1,000]	
			Theater support vessel hull material development		[4,000]	
			Polymer aircraft components		[2,000]	
1319	0602131M	6	MARINE CORPS LANDING FORCE TECHNOLOGY	35,398		35,398
1319	0602232N	7	COMMUNICATIONS, COMMAND AND CONTROL, INTELL. SURVEILLANCE			
1319	0602233N	8	HUMAN SYSTEMS TECHNOLOGY			

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0602234N	9	MATERIALS, ELECTRONICS AND COMPUTER TECHNOLOGY	60,134		60,134
1319	0602235N	10	COMMON PICTURE APPLIED RESEARCH	63,726		86,726
1319	0602236N	11	WARFIGHTER SUSTAINMENT APPLIED RESEARCH			
			Aerospace alloy research		23,000	
			Microsystem fuze, safe & arm devices		[2,000]	
			Infectious disease analysis		[2,000]	
			Biowarfare detector		[2,500]	
			Sensornet		[12,000]	
			Titanium materials research		[2,000]	
1319	0602271N	12	RF SYSTEMS APPLIED RESEARCH	49,151	3,500	52,651
			Wide bandgap semiconductor research		[1,500]	
			High brightness electronics		[2,000]	
1319	0602435N	13	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	48,482	2,000	50,482
			Integrated littoral sensor network		[2,000]	
1319	0602747N	14	UNDERSEA WARFARE APPLIED RESEARCH	64,060	1,000	65,060
			Low acoustic propulsion		[1,000]	
1319	0602782N	15	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	48,016		48,016
1319	0603114N	16	POWER PROJECTION ADVANCED TECHNOLOGY	92,359	4,000	96,359
			Free electron laser		[9,000]	
			Unjustified growth		[-5,000]	

**Title II-RDT and E**  
(Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0603123N	17	FORCE PROTECTION ADVANCED TECHNOLOGY	82,130	27,500	109,630
			High temp superconductor (HTS) synchronous Navy propulsion motor		[7,000]	
			Development of wide bandgap semiconductor materials		[6,000]	
			Wave Power Demonstration Project		[4,000]	
			Composite twisted rudder		[1,000]	
			Tactical aircraft directed IR countermeasures		[7,000]	
			Steel sandwich panel qualification		[2,500]	
1319	0603235N	18	COMMON PICTURE ADVANCED TECHNOLOGY	79,521	3,000	82,521
			Consolidated undersea situational awareness		[3,000]	
1319	0603236N	19	WARFIGHTER SUSTAINMENT ADVANCED TECHNOLOGY	61,103	17,000	78,103
			Automatic container and cargo handling systems		[4,000]	
			Ultrasonic consolidation of matrix composites		[2,000]	
			Expeditionary logistics for the 21st Century		[6,000]	
			Defense Systems Modernization and Sustainment Initiative		[5,000]	
1319	0603271N	20	RF SYSTEMS ADVANCED TECHNOLOGY	44,046	3,000	47,046
			Real time precision targeting radar		[3,000]	
1319	0603640M	21	USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	58,222	9,000	67,222
			Unmanned tactical combat vehicle		[1,000]	
			Water purification research		[8,000]	
1319	0603712N	22	ENVIRONMENTAL QUALITY AND LOGISTICS ADVANCED TECHNOLOGY	167,626		167,626
1319	0603727N	23	NAVY TECHNICAL INFORMATION PRESENTATION SYSTEM	16,719	2,600	19,319
1319	0603729N	24	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY		[600]	
			Anti-oxidant micronutrients research		[2,000]	
			Battlefield pharmaceutical test			

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0603747N	25	UNDERSEA WARFARE ADVANCED TECHNOLOGY	26,515		26,515
1319	0603757N	26	JOINT WARFARE EXPERIMENTS	26		26
1319	0603758N	27	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	16,006		16,006
1319	0603782N	28	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY	32,899		32,899
1319	0603792N	29	ADVANCED TECHNOLOGY TRANSITION			
1319	0603207N	30	AIR/OCEAN TACTICAL APPLICATIONS	24,431		24,431
1319	0603216N	31	AVIATION SURVIVABILITY	10,820	5,500	16,320
			Rotorcraft External Airbag System		[5,500]	
1319	0603237N	32	DEPLOYABLE JOINT COMMAND AND CONTROL	42,394		42,394
1319	0603254N	33	ASW SYSTEMS DEVELOPMENT	4,541	5,000	9,541
			Claymore marine		[5,000]	
1319	0603261N	34	TACTICAL AIRBORNE RECONNAISSANCE	6,448		6,448
1319	0603382N	35	ADVANCED COMBAT SYSTEMS TECHNOLOGY	67,605		67,605
1319	0603502N	36	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	103,308		103,308
1319	0603506N	37	SURFACE SHIP TORPEDO DEFENSE	46,896		46,896
1319	0603512N	38	CARRIER SYSTEMS DEVELOPMENT	157,479	9,000	166,479
			Aviation Ship Integration Center		[9,000]	
1319	0603513N	39	SHIPBOARD SYSTEM COMPONENT DEVELOPMENT	18,993	3,000	21,993
			Amorphous metal permanent magnet generator set		[3,000]	
1319	0603525N	40	PILOT FISH	78,223		78,223
1319	0603527N	41	RETRACT LARCH	82,532		82,532
1319	0603536N	42	RETRACT JUNIPER	36,915		36,915
1319	0603542N	43	RADIOLOGICAL CONTROL	946		946

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0603553N	44	SURFACE ASW Surface ship combat systems warfare enhancements Improved surface vessel torpedo launcher	17,633	5,800 [3,000] [2,800]	23,433
1319	0603559N	45	SSGN CONVERSION	19,970		19,970
1319	0603561N	46	ADVANCED SUBMARINE SYSTEM DEVELOPMENT Submarine payloads and sensors	81,160	10,000 [10,000]	91,160
1319	0603562N	47	SUBMARINE TACTICAL WARFARE SYSTEMS	5,957	5,000	5,957
1319	0603563N	48	SHIP CONCEPT ADVANCED DESIGN Integrated Condition Assessment System	3,723	[5,000]	8,723
1319	0603564N	49	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	169,733		169,733
1319	0603570N	50	ADVANCED NUCLEAR POWER SYSTEMS			
1319	0603573N	51	ADVANCED SURFACE MACHINERY SYSTEMS	47,786		47,786
1319	0603576N	52	CHALK EAGLE	352,089		352,089
1319	0603581N	53	LITTORAL COMBAT SHIP (LCS)	80,840	-5,000 [5,000]	75,840
1319	0603582N	54	COMBAT SYSTEM INTEGRATION Context-adaptable autonomous and remote unmanned systems Transfer to PE 64503N (RDN 108)			
1319	0603609N	55	CONVENTIONAL MUNITIONS	34,151		34,151
1319	0603611M	56	MARINE CORPS ASSAULT VEHICLES	236,969		236,969
1319	0603612M	57	USMC MINE COUNTERMEASURES SYSTEMS - ADV DEV	4,522		4,522



# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0603635M	58	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM Urban operations environmental laboratory Urban operations nonlethal and scalable weaponization Clearing facilities with novel technology Anti-Armor Weapon System - Heavy	22,440	16,700 [6,400] [2,900] [3,400] [4,000]	39,140
1319	0603654N	59	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	18,047		18,047
1319	0603658N	60	COOPERATIVE ENGAGEMENT	103,452		103,452
1319	0603713N	61	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	26,232		26,232
1319	0603721N	62	ENVIRONMENTAL PROTECTION Marine mammal detection and mitigation	24,641	3,000 [3,000]	27,641
1319	0603724N	63	NAVY ENERGY PROGRAM Proton exchange membrane (PEM) fuel cell trial	1,494	3,000 [3,000]	4,494
1319	0603725N	64	FACILITIES IMPROVEMENT	1,621		1,621
1319	0603734N	65	CHALK CORAL	58,467		58,467
1319	0603739N	66	NAVY LOGISTIC PRODUCTIVITY	7,421		7,421
1319	0603746N	67	RETRACT MAPLE	275,407		275,407
1319	0603748N	68	LINK PLUMERIA	112,997		112,997
1319	0603751N	69	RETRACT ELM	48,130		48,130
1319	0603755N	70	SHIP SELF DEFENSE	9,493		9,493
1319	0603764N	71	LINK EVERGREEN	63,346		63,346
1319	0603787N	72	SPECIAL PROCESSES	44,232		44,232
1319	0603790N	73	NATO RESEARCH AND DEVELOPMENT	10,151		10,151
1319	0603795N	74	LAND ATTACK TECHNOLOGY Reduction - Affordable Weapons System	82,049	-28,900 [-28,900]	53,149

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0603851M	75	NONLETHAL WEAPONS	43,321		43,321
1319	0603857N	76	ALL SERVICE COMBAT IDENTIFICATION EVALUATION TEAM (ASCIET)	13,626		13,626
1319	0603860N	77	JOINT PRECISION APPROACH AND LANDING SYSTEMS	32,391		32,391
1319	0603879N	78	SINGLE INTEGRATED AIR PICTURE (SIAP) SYSTEM ENGINEER (SE)	20,252		20,252
1319	0603889N	79	COUNTERDRUG RDT&E PROJECTS			
1319	0604272N	80	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES (TADIRCM)			
1319	0604707N	81	SPACE AND ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINEERING	25,943		25,943
1319	0604787N	82	JOINT WARFARE TRANSFORMATION PROGRAMS	22,450		22,450
1319	0604212N	83	OTHER HELO DEVELOPMENT	186,970		186,970
1319	0604214N	84	AV-8B AIRCRAFT - ENG DEV	12,284		12,284
1319	0604215N	85	STANDARDS DEVELOPMENT	57,675		57,675
1319	0604216N	86	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	78,757		78,757
1319	0604217N	87	S-3 WEAPON SYSTEM IMPROVEMENT			
1319	0604218N	88	AIR/OCEAN EQUIPMENT ENGINEERING	4,506		4,506
1319	0604221N	89	P-3 MODERNIZATION PROGRAM	9,554		9,554
1319	0604230N	90	WARFARE SUPPORT SYSTEM	5,201		5,201
1319	0604231N	91	TACTICAL COMMAND SYSTEM	49,180		49,180
1319	0604234N	92	ADVANCED HAWKEYE	597,015		597,015
1319	0604245N	93	H-1 UPGRADES	90,389	42,000	132,389
			AH-1Z/UH-1Y upgrades - turned exhaust		[42,000]	
1319	0604261N	94	ACOUSTIC SEARCH SENSORS	13,363		13,363
1319	0604262N	95	V-22A	304,164		304,164
1319	0604264N	96	AIR CREW SYSTEMS DEVELOPMENT	8,838	4,000	12,838
			Joint Helmet Mounted Cueing System Quad Eye		[4,000]	

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0604269N	97	EA-18	357,502		357,502
1319	0604270N	98	ELECTRONIC WARFARE DEVELOPMENT	48,956		48,956
1319	0604273N	99	VHXX EXECUTIVE HELO DEVELOPMENT VXX executive helicopter execution	777,398	-145,000 [-145,000]	632,398
1319	0604280N	100	JOINT TACTICAL RADIO SYSTEM - NAVY (JTRS-NAVY)	78,624		78,624
1319	0604300N	101	SC-21 TOTAL SHIP SYSTEM ENGINEERING For second DD(X)	1,431,585	99,400 [99,400]	1,530,985
1319	0604307N	102	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	146,463		146,463
1319	0604311N	103	LPD-17 CLASS SYSTEMS INTEGRATION	8,988		8,988
1319	0604312N	104	TRI-SERVICE STANDOFF ATTACK MISSILE	27,047		27,047
1319	0604329N	105	SMALL DIAMETER BOMB (SDB)	9,961		9,961
1319	0604366N	106	STANDARD MISSILE IMPROVEMENTS Standard missile insensitive munitions improvements Advanced missile data Link	99,022	10,000 [5,000] [5,000]	109,022
1319	0604373N	107	AIRBORNE MCM	50,514	3,000 [3,000]	53,514
1319	0604503N	108	Surface Navy integrated undersea tactical technology (SNUITT) sim SSN-688 AND TRIDENT MODERNIZATION Submarine expendable communication device Transfer from PE 63582N (RDN 54)	75,359	14,000 [4,000] [10,000]	89,359
1319	0604504N	109	AIR CONTROL	13,102		13,102
1319	0604507N	110	ENHANCED MODULAR SIGNAL PROCESSOR	1,075		1,075
1319	0604512N	111	SHIPBOARD AVIATION SYSTEMS Synthetic material arresting cable	28,631	2,500 [2,500]	31,131
1319	0604518N	112	COMBAT INFORMATION CENTER CONVERSION	8,228		8,228

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0604558N	113	NEW DESIGN SSN Submarine information assurance Multi-mission module Large aperture bow array Common submarine radio room	143,270	76,100 [2,000] [56,000] [5,000] [13,100]	219,370
1319	0604561N	114	SSN-21 DEVELOPMENTS	3,020		3,020
1319	0604562N	115	SUBMARINE TACTICAL WARFARE SYSTEM Submarine warfare system strike weapon status control	43,404	6,000 [6,000]	49,404
1319	0604567N	116	SHIP CONTRACT DESIGN/ LIVE FIRE T&E	130,908		130,908
1319	0604574N	117	NAVY TACTICAL COMPUTER RESOURCES	2,381		2,381
1319	0604601N	118	MINE DEVELOPMENT	6,123		6,123
1319	0604603N	119	UNGUIDED CONVENTIONAL AIR-LAUNCHED WEAPONS			
1319	0604610N	120	LIGHTWEIGHT TORPEDO DEVELOPMENT	9,965		9,965
1319	0604618N	121	JOINT DIRECT ATTACK MUNITION			
1319	0604654N	122	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	8,081		8,081
1319	0604703N	123	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	3,005		3,005
1319	0604710N	124	NAVY ENERGY PROGRAM			
1319	0604721N	125	BATTLE GROUP PASSIVE HORIZON EXTENSION SYSTEM Anti-terrorism Tech Surveillance System	17,981	3,000 [3,000]	20,981
1319	0604727N	126	JOINT STANDOFF WEAPON SYSTEMS	9,531		9,531
1319	0604755N	127	SHIP SELF DEFENSE (DETECT & CONTROL) Directed energy user scrutiny equipment	48,154	5,000 [5,000]	53,154
1319	0604756N	128	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	51,213		51,213

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0604757N	129	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	28,233	5,000	33,233
			NULKA research to counter multi-mode RF and IR		[5,000]	
1319	0604771N	130	MEDICAL DEVELOPMENT	6,942	3,000	9,942
			Sea rescue technology		[3,000]	
1319	0604777N	131	NAVIGATION/ID SYSTEM	28,104		28,104
1319	0604784N	132	DISTRIBUTED SURVEILLANCE SYSTEM	7,776		7,776
1319	0604800N	133	JOINT STRIKE FIGHTER (JSF)	2,264,507	15,000	2,279,507
			STOVL lift fan study		[15,000]	
1319	0604910N	134	SMART CARD	695		695
1319	0605013M	135	INFORMATION TECHNOLOGY DEVELOPMENT	9,301		9,301
1319	0605013N	136	INFORMATION TECHNOLOGY DEVELOPMENT	109,543		109,543
1319	0605014N	137	DEFENSE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM (DIMHRS) -			
1319	0605500N	138	MULTI-MISSION MARITIME AIRCRAFT (MMA)	496,029		496,029
1319	0508713N	139	NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)			
1319	0604256N	140	THREAT SIMULATOR DEVELOPMENT	23,866		23,866
1319	0604258N	141	TARGET SYSTEMS DEVELOPMENT	35,677		35,677
1319	0604759N	142	MAJOR T&E INVESTMENT	39,787		39,787
1319	0605152N	143	STUDIES AND ANALYSIS SUPPORT - NAVY	2,183		2,183
1319	0605154N	144	CENTER FOR NAVAL ANALYSES	43,982		43,982
1319	0605155N	145	FLEET TACTICAL DEVELOPMENT	2,338		2,338
1319	0605502N	146	SMALL BUSINESS INNOVATIVE RESEARCH			
1319	0605804N	147	TECHNICAL INFORMATION SERVICES	696		696
1319	0605853N	148	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	31,407		31,407
1319	0605856N	149	STRATEGIC TECHNICAL SUPPORT	3,493		3,493

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0605861N	150	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	66,117	-3,800	62,317
			Unjustified growth		[-3,800]	
1319	0605862N	151	RDT&E INSTRUMENTATION MODERNIZATION	19,370		19,370
1319	0605863N	152	RDT&E SHIP AND AIRCRAFT SUPPORT	81,308		81,308
1319	0605864N	153	TEST AND EVALUATION SUPPORT	255,926		255,926
1319	0605865N	154	OPERATIONAL TEST AND EVALUATION CAPABILITY	13,044		13,044
1319	0605866N	155	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	2,941		2,941
1319	0605867N	156	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	12,160		12,160
1319	0605873M	157	MARINE CORPS PROGRAM WIDE SUPPORT	19,701		19,701
1319	0909999N	158	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS			
1319	0603660N	159	ADVANCED DEVELOPMENT PROJECTS	[ ]		
1319	0603661N	160	RETRACT VIOLET	[ ]		
1319	0101221N	161	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	108,782	5,000	113,782
			Thin-plate pure lead battery technology		[5,000]	
1319	0101224N	162	SSBN SECURITY TECHNOLOGY PROGRAM	43,408		43,408
1319	0101226N	163	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	8,453		8,453
1319	0101402N	164	NAVY STRATEGIC COMMUNICATIONS	31,391		31,391
1319	0203761N	165	RAPID TECHNOLOGY TRANSITION (RTT)	14,630		14,630
1319	0204136N	166	F/A-18 SQUADRONS	134,580		134,580
1319	0204152N	167	E-2 SQUADRONS	6,055		6,055
1319	0204163N	168	FLEET TELECOMMUNICATIONS (TACTICAL)	19,784		19,784
1319	0204229N	169	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	28,776	5,000	33,776
			Precision Terrain Aided Navigation		[5,000]	
1319	0204311N	170	INTEGRATED SURVEILLANCE SYSTEM	16,965		16,965

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1319	0204413N	171	AMPHIBIOUS TACTICAL SUPPORT UNITS (DISPLACEMENT CRAFT)	2,604		2,604
1319	0204571N	172	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	21,644		21,644
1319	0204574N	173	CRYPTOLOGIC DIRECT SUPPORT	1,460		1,460
1319	0204575N	174	ELECTRONIC WARFARE (EW) READINESS SUPPORT	12,139		12,139
1319	0205601N	175	HARM IMPROVEMENT	163,371		163,371
1319	0205604N	176	TACTICAL DATA LINKS	18,977		18,977
1319	0205620N	177	SURFACE ASW COMBAT SYSTEM INTEGRATION	10,612		10,612
1319	0205632N	178	MK-48 ADCAP	21,620		21,620
1319	0205633N	179	AVIATION IMPROVEMENTS	62,635	4,000	66,635
			Corrosion inhibiting coatings		[4,000]	
1319	0205658N	180	NAVY SCIENCE ASSISTANCE PROGRAM	3,821		3,821
1319	0205675N	181	OPERATIONAL NUCLEAR POWER SYSTEMS	64,554		64,554
1319	0206313M	182	MARINE CORPS COMMUNICATIONS SYSTEMS	268,638	3,800	272,438
			Communication emitter sensing and attacking system		[3,800]	
1319	0206623M	183	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	44,828		44,828
1319	0206624M	184	MARINE CORPS COMBAT SERVICES SUPPORT	10,731	2,000	12,731
			Battlefield Management System		[2,000]	
1319	0207161N	185	TACTICAL AIM MISSILES	4,061		4,061
1319	0207163N	186	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	9,085		9,085
1319	0301303N	187	MARITIME INTELLIGENCE	[ ]		
1319	0301323N	188	COLLECTION MANAGEMENT	[ ]		
1319	0301327N	189	TECHNICAL RECONNAISSANCE AND SURVEILLANCE	[ ]		
1319	0303109N	190	SATELLITE COMMUNICATIONS (SPACE)	573,092		573,092
1319	0303140N	191	INFORMATION SYSTEMS SECURITY PROGRAM	18,676		18,676

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
1319	0304111N	192	SPACE ACTIVITIES	[ ]		
1319	0305149N	193	COBRA JUDY	80,694	13,000	93,694
			Cobra Judy replacement		[13,000]	
1319	0305160N	194	NAVY METEOROLOGICAL AND OCEAN SENSORS-SPACE (METOC)			
1319	0305188N	195	JOINT C4ISR BATTLE CENTER (JBC)	4,215		4,215
1319	0305192N	196	JOINT MILITARY INTELLIGENCE PROGRAMS	43,569		43,569
1319	0305204N	197	TACTICAL UNMANNED AERIAL VEHICLES (JMIP)	4,746		4,746
1319	0305205N	198	ENDURANCE UNMANNED AERIAL VEHICLES	53,439		53,439
1319	0305206N	199	AIRBORNE RECONNAISSANCE SYSTEMS	113,438		113,438
1319	0305207N	200	MANNED RECONNAISSANCE SYSTEMS (JMIP)	10,191		10,191
1319	0305208N	201	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	20,203		20,203
1319	0305927N	202	NAVAL SPACE SURVEILLANCE	3,635		3,635
1319	0307207N	203	AERIAL COMMON SENSOR (ACS) (JMIP)	24,909		24,909
1319	0308601N	204	MODELING AND SIMULATION SUPPORT	7,262	9,000	16,262
			Modeling and simulation research		[9,000]	
1319	0702207N	205	DEPOT MAINTENANCE (NON-IF)			
1319	0708011N	206	INDUSTRIAL PREPAREDNESS	56,565		56,565
1319	0708730N	207	MARITIME TECHNOLOGY (MARITECH)	10,265		10,265
1319	XXXXXXXXXX	999	CLASSIFIED PROGRAMS	1,003,485		1,003,485
			Financial information systems		-15,200	-15,200
			<b>Total, RDT&amp;E Navy</b>	<b>16,346,391</b>	<b>333,000</b>	<b>16,679,391</b>



### **Navy university research**

The budget request included \$83.5 million in PE 61103N for the Navy University Research Initiatives program. The committee notes that basic research investments made by the Office of Naval Research have contributed greatly to the technological dominance enjoyed by our nation's military. These investments have been both militarily relevant, leading to the development of radars, stealth, and unmanned systems, and scientifically revolutionary, supporting the work of over 50 Nobel Prize winners. The committee recommends an increase of \$17.0 million in PE 61103N: \$5.0 million for multifunctional materials for naval structures, such as energy absorbing ship hulls; \$1.5 million to perform nanoparticles materials research on coatings geared toward reduced fuel usage and combating abrasion damage; \$5.0 million for corrosion research, a continuing and expensive challenge for the Navy; \$1.5 million for neural engineering research at the intersection of engineering, computer science, and neural science, with an emphasis on increasing human-machine interfaces and perfecting remote operations; \$1.0 million for basic remote sensing research; and \$3.0 million for research in basic nanoscience and nanomaterials focused on properties and performance characteristics for naval applications.

The committee notes that the Navy is in the process of reviewing investments in basic research. The committee expects the Navy to continue its traditional support of truly fundamental, revolutionary research in academia, industry, and government laboratories focused on discovery and innovation as it conducts this review.

### **Navy science and technology outreach**

The Office of Naval Research initiated a program in fiscal year 2003 to revitalize the science and technology (S&T) capabilities of the Navy's research and development centers. The budget request included \$17.7 million in PE 61152N for In-House Laboratory Independent Research, which supports the Navy's S&T capability initiative. The committee recommends an increase in PE 61152N of \$2.5 million to support a new pilot program—the Naval Research Science and Technology for America's Readiness (N-Star) program. The N-Star program would focus on outreach opportunities in high schools and middle schools, and leverage the resources and expertise available in Navy facilities to engage and mentor students who have science and engineering aptitude and interests.

### **Applied force protection technologies**

The budget request included \$96.3 million in PE 62123N for force protection applied research. To accelerate development of protection and situational awareness technologies, the committee recommends an increase in PE 62123N of \$15.0 million: \$2.0 million for polymer aircraft components; \$4.0 million for hyperspectral data fusion; \$4.0 million for the development of novel materials to support high-speed theater support vessels; \$1.0 million for low-cost hybrid fire retardant resins; \$1.0 million for structural reliability composite research to address Navy challenges in consistent, reliable, production of large parts with inherent material property variability; and \$3.0 million for battery development, specifically for unmanned systems. The committee notes that the Navy

and the Office of Force Transformation are working closely to explore the development of unmanned platforms and their potential contribution to the deployment of truly networked, agile forces.

#### **Warfighter sustainment applied research**

The budget request included \$63.7 million in PE 62236N for warfighter sustainment applied research. The committee recommends an increase in PE 62236N of \$23.0 million to accelerate the Navy's pursuit of future naval capabilities in the areas of expeditionary logistics and innovation-based efforts in warfighter protection and power projection. Of this amount, the committee recommends an increase of \$2.0 million for advanced aerospace alloy research; \$2.0 million for titanium materials research; \$2.0 million for microsystem fuze, safe and arm devices, currently outpaced by weapons requirements; \$12.0 million for the SensorNet system to incorporate legacy systems and new technologies into a common data architecture for detection, interdiction, and comprehensive incident management to meet a five-minute response objective; \$2.5 million for highly sensitive biowarfare detectors; and \$2.5 million for infectious disease analysis, geared toward development of tools for rapid detection, treatment, and triage of individuals infected as a result of exposure to biological agents and pathogens.

#### **Radio frequency systems applied research**

The budget request included \$49.2 million in PE 62271N for radio frequency systems applied research. The radio frequency (RF) systems applied research program addresses technology deficiencies associated with naval platform needs, and supports development of technologies to enable missile defense, directed energy, platform protection, time critical strike, and information distribution. The committee recommends an increase in PE 62271N of \$2.0 million for high brightness electron sources for vacuum electronics applications in support of radiation resistant communications needs.

Radio frequency systems applied research projects also support electronic warfare, communications and navigation missions. The committee recommends an increase in PE 62271N of \$1.5 million for wide bandgap silicon carbide semiconductor research, which would enable updated radar systems required by the Navy and Marine Corps.

#### **Integrated littoral sensor network**

The budget request included \$48.5 million in PE 62435N for the ocean warfighting environment applied research. Real time knowledge of the Battlespace Environment (BSE) is a key capability required by the Navy's three transformational capabilities: Sea Strike, Sea Shield, and Sea Basing. The committee recommends an increase in PE 62435N of \$2.0 million for the integrated littoral sensor network, which is designed to provide a portable suite of sensors, models and informatics techniques for detection, diagnosis, and predictions of man-made and natural water-borne hazards and threats, supporting the Navy's need for real time knowledge of the battlespace.

### **Low acoustic propulsion**

The budget request included \$64.1 million in PE 62747N for ocean warfighting environment applied research. The committee recommends an increase in PE 62747N of \$1.0 million for low acoustic propulsion research to upgrade the existing torpedo inventory to a safer, lower cost electric propulsion system with improved stealth capabilities.

### **Free electron laser**

The budget request included \$92.4 million in PE 63114N for power projection advanced technology. The committee recommends an increase in PE 63114N of \$9.0 million for acceleration and demonstration of the high power free electron laser (FEL). The Navy has identified free electron lasers as a possible future directed energy weapon for the defense of Navy assets. The committee commends the Navy for its support of the FEL program and, expects the Office of Naval Research to fully fund the ongoing program to reach weapons grade power levels.

The committee recommends a decrease in PE 63114N of \$5.0 million for aerospace research programs that have grown more rapidly than warranted, given Navy requirements in this area.

### **Force Protection Advanced Technology**

The budget request included \$82.1 million in PE 63123N for force protection advanced technology, but included no funding for the following six initiatives: (1) power generating buoys; (2) high temperature superconducting alternating current (HTS AC) synchronous motor; (3) tactical aircraft directed infrared countermeasures (TADIRCM); (4) composite twisted rudder; (5) wide bandgap semiconductor materials; and (6) steel sandwich panels.

There continues to be a need for reliable sources of non-polluting electric power generating capability for remote Navy sites around the world. The Navy has been investigating technologies based on power generating buoys that could be easily deployed to expeditionary sites. These buoys could enable the Navy to tap an infinitely renewable energy source of wave power when in situations where building more conventional generating capacity is not possible or practical. The committee recommends an additional \$4.0 million in PE 63123N for improving and demonstrating wave power technology.

The Navy is working on the electric warship program to address electrical and auxiliary system component technology to provide improvements in system energy and power density, system operating efficiency and the ability to recover from casualties. The Navy is shifting to integrated electric propulsion approaches for the fleet, most notably in the DD(X) destroyer program. A HTS AC synchronous motor and generator hold the potential to be much smaller, quieter and less expensive than alternative systems. The committee believes that the Navy should continue development efforts on a large scale HTS AC synchronous motor to determine whether such a motor could serve as a central component of a propulsion system. Therefore, the committee recommends an additional \$7.0 million in PE 63123N to build and begin testing a DD(X)-size HTS AC synchronous motor.

The Navy has been investigating the potential for employing directed infrared countermeasures (DIRCM) technologies on its tactical aircraft. Such systems would be used to defeat IR-guided surface-to-air missiles. The committee understands that the Naval Air Systems Command has structured a program proposal that would incorporate a TADIRCM system within a derivative of an existing tactical aircraft pod. The proposal would include flight testing as a risk reduction effort before the planned start of system design and demonstration. The committee believes that it is important to increase the self-protection capability of our tactical aircraft, and recommends an increase of \$7.0 million in PE 63123N for this effort.

There is a potential for fuel savings by outfitting surface combatants with composite rudders that are built with a surface that is non-planar, known as a twisted rudder. Navy model testing of this design indicates that the Navy might achieve significant annual fuel savings by outfitting its surface combatants with rudders built to this new design. To verify the model testing, the Navy needs to build a ship set of full-scale twisted rudders and install them on a destroyer. The committee recommends an increase of \$1.0 million in PE 63123N to build and install a full-scale ship set of twisted rudders.

Advanced power electronics needed for many Department of Defense systems depend on the development of wide bandgap (WBG) semiconductor materials capable of significantly higher power, higher frequency at higher operating temperature, and greater efficiencies. These devices could have broad applications in such systems as radars for surface ships and aircraft. These devices could be less expensive if wafer production processes could be improved. Since reducing the recurring costs of these semiconductors would have a significant effect on costs of important weapons systems, the committee recommends an additional \$6.0 million in PE 63123N for developing better wide bandgap semiconductors production processes.

The committee understands that an effort is underway within the Navy to develop methods for using steel sandwich panels to reduce weight in ships. The committee believes that this technology holds great potential for cost reduction and performance enhancement. The committee recommends an increase of \$2.5 million in PE 63123N to develop and qualify advanced steel sandwich panels for the construction of appropriate sections of Navy ships.

In total, the committee recommends an authorization of \$109.6 million in PE 63123N.

### **Common picture advanced technology**

The budget request included \$79.5 million in PE 63235N for common picture advanced technology. The use of intelligent software agents is a major new tool for the Navy that provides timely, effective, and efficient decision support under conditions of great uncertainty. The committee recommends an increase in PE 63235N of \$3.0 million for a consolidated undersea situational awareness tool, which provides information superiority through precise decision making aids.

### **Warfighter sustainment advanced technology**

The budget request included \$61.1 million in PE 63236N for warfighter sustainment advanced technology, including some funding for efforts associated with expeditionary logistics, but no funding for: (1) automatic container and cargo handling systems; (2) ultrasonic consolidation of matrix composites; or (3) defense system modernization and sustainment initiative.

The expeditionary logistics investment is intended to develop and improve transformational Naval surface distribution/replenishment techniques, and to improve the situational awareness of readiness and operating logistics status. The committee believes that the Navy might be able to employ software products that use decision support planning tools to process timely, accurate information on tactical equipment and weapons system on the battlefield. Such tools could support decision making by accurately modeling and predicting failure of important expeditionary systems. Therefore, the committee recommends an increase of \$6.0 million in PE 63236N for continuing this development effort.

An automated cargo and container handling system would provide the Navy with a capability of offloading supply ships in support of sea-based operations. The system would use multi-point stabilization to overcome the dangerous pendulum effect that can plague existing shipboard cranes. The committee recommends an increase of \$4.0 million in PE 63236N to develop, fabricate, and test an automated container and cargo handling system capable of operating in sea states of up to sea state three.

The Navy is developing a number of weapons systems that seek to employ metal matrix composite materials. In order to make these materials more affordable, the Navy needs to develop new technologies and production processes. One of these potential approaches would employ ultrasonic energy to consolidate these metal matrix composites during fabrication. Therefore, the committee recommends an increase of \$2.0 million in PE 63236N for developing ultrasonic consolidation techniques for producing metal matrix composites.

Under the defense systems modernization and sustainment initiative, the Office of Naval Research (ONR) has been conducting developments in four specific focus areas: (1) material aging; (2) life cycle engineering and economic decision system; (3) asset health management; and (4) reliability, availability, and maintainability initiative. The objective of these efforts is to develop processes and tools to track the status and likely future health of systems and, in so doing, detect and diagnose potential equipment failures before they could cause problems in the execution of missions. This effort is also intended to produce decision support systems that would provide greater insight into when the Navy should upgrade weapons and support systems. The committee recommends an additional \$5.0 million in PE 63236N to continue these efforts.

The committee recommends a total authorization of \$78.1 million in PE 63236N.

### **Precision targeting radar**

The budget request included \$44.0 million in PE 63271N for radio frequency advanced technology. The committee recommends

an increase in PE 63271N of \$3.0 million for a real time precision targeting radar system under development to update current systems with wideband surface capabilities for all-weather surveillance, detection, and location of time critical targets. The program will increase the number of test flight hours and add software for surface target identification.

#### **Water purification demonstration**

The budget request included \$58.2 million in PE 63640M for Marine Corps advanced technology demonstrations. Air deliverable, high capacity water purification systems meet a critical need during all military missions. Research on high efficiency, compact technology will help alleviate the significant logistical load of transporting water. The committee recommends an increase in PE 63640M of \$8.0 million for demonstration of the expeditionary warfare water purification system.

#### **Anti-oxidant micronutrients**

The budget request included \$16.7 million in PE 63729N for warfighter protection advanced technology. This project supports the development and demonstration of field medical equipment: diagnostic capabilities and treatments; technologies to improve warfighter safety and to enhance personnel performance under adverse conditions; and systems to prevent occupational injury and disease in hazardous deployment environments. Anti-oxidant micronutrients provide protection for the warfighter against physical stress, environmental exposures, and hazardous agents in combat operations. The committee recommends an increase in PE 63729N of \$600,000 for anti-oxidant micronutrients for warfighter protection and \$2.0 million for battlefield pharmaceutical tests, to complete preclinical trial testing on a technology to enhance the body's ability to use available blood oxygen, preventing shock, and providing increased life-saving potential for victims who experience severe blood loss injuries.

#### **Rotorcraft external airbag protection system**

The budget request included \$10.8 million in PE 63216N for aviation survivability developments, but included no funding for the development of the rotorcraft external airbag protection system (REAPS). The committee continues to support this system for its potential to make helicopter crashes more survivable, and recommends an increase of \$5.5 million in PE 63216N for the continued development of REAPS.

#### **Anti-submarine warfare systems development**

The budget request included \$4.5 million in PE 63254N for anti-submarine warfare (ASW) systems development, but included no funds for the Claymore Marine program. This program was established to investigate and demonstrate a new littoral ASW system that provides significant increase in capability using existing hardware and a classified algorithm. The algorithm is implemented for real time processing onboard the host system, and has been modified for mine detection in addition to airborne ASW. The committee

recommends an increase of \$5.0 million in PE 63254N for the Claymore Marine program.

#### **Carrier systems development**

The budget request included \$157.5 million in PE 63512N for carrier systems development, but included no funding for the Aviation Ship Integration Center. This center provides an environment that supports the development and conceptualization of fully integrated future aircraft carrier advanced technology design. The center is focused on reducing costs by increasing efficiencies in air capable shipbuilding programs. The Chief of Naval Operations has included the funding for this center on his Unfunded Priority List. The committee recommends an increase of \$9.0 million in PE 63512N for the Aviation Ship Integration Center.

#### **Amorphous metal permanent magnet generator set**

The budget request included \$19.0 million in PE 63513N for shipboard system component developments, including \$4.1 million for integrated power systems development.

The committee understands that generator sets employing amorphous metal permanent magnets have the potential to greatly increase power output, while reducing the size and weight of the generator set. Such generator technology also holds the potential for reducing life cycle costs by increasing fuel efficiency and reducing logistics support costs.

The committee believes that the Navy should explore this promising technology, and recommends an increase of \$3.0 million in PE 63513N for prototype development and testing of an amorphous metal permanent magnet generator set.

#### **Surface ship combat systems warfighting enhancements**

The budget request included \$17.6 million in PE 63553N for surface ship anti-submarine warfare development, but included no funding for surface ship combat systems that model the submarine advanced processor build (APB) program, or for an improved surface torpedo launcher.

Legacy surface ship combat systems employ standard hardware and software which is tailored to military specifications. Modifications and enhancements to meet threats in the contact-dense littoral and expeditionary warfare environments are prohibitively expensive due to the closed nature of existing architectures. The committee believes that surface combatants would benefit from integrating selected submarine APB products, and recommends an increase of \$3.0 million in PE 63553N for this purpose.

The Navy has investigated the potential for a modular, gas generator launch canister for launching torpedos. This project uses commercial off-the-shelf (COTS), automobile-style airbags for launch energy. Employment of these COTS components could greatly reduce the burden of maintaining the current air flask-based torpedo tubes. The committee recommends an increase of \$2.8 million in PE 63553N for this purpose.

### **Submarine payloads and sensors**

The budget request included \$81.2 million in PE 63561N for advanced submarine systems development, but included no funding to develop advanced payload and sensor systems. The advanced submarine systems development program incorporates the recommendations of the Defense Science Board that the Navy develop new capabilities for our submarine forces. While there are ongoing developments funded in this program, there is no opportunity for new technologies to be introduced. The committee recommends an increase of \$10.0 million in PE 63561N to allow for new projects.

### **Integrated condition assessment system**

The budget request included \$3.7 million in PE 63563N for ship concept advanced design, but included no funding to develop and prototype additional hardware and software components to enhance the integrated condition assessment system (ICAS). Continuous enhancements would expand the capabilities of ICAS and reduce shipboard weight and space requirements. The committee recommends an increase of \$5.0 million for ICAS development.

### **Combat systems integration**

The budget request included \$80.8 million in PE 63582N, for combat systems integration and battle force interoperability improvements. The request included \$10.0 million for phase III of a small business innovative research (SBIR) project for an advanced processor build, but no funding to develop better systems to control autonomous and remotely controlled unmanned underwater vehicles (UUVs).

The committee has confirmed with the Navy that the SBIR phase III project for the advanced processor build should be executed in PE 64503N. Therefore, the committee recommends a decrease of \$10.0 million in PE 63582N, for combat systems integration.

The Navy must operate current UUVs with multiple human-system interfaces (HSI) that greatly complicate training and reduce systems performance. With the Navy's significant emphasis on a large number of unmanned systems, the committee believes that the Navy should establish an effort to conduct research on advanced UUV HSI technology. The goal of this effort would be to develop a standardized set of UUV HSI open architecture software that includes applications programs for UUV control, data collection, and interaction. The committee recommends an increase of \$5.0 million to establish a program to pursue these developments.

The committee recommends a total authorization of \$75.8 million in PE 63582N, for combat systems integration and battle force interoperability.

### **Non-lethal weapons**

The budget request included \$22.4 million in PE 63635M, for Marine Corps ground combat and supporting arms systems, including \$493,000 for the Anti-Armor Weapon System program, but no funding for non-lethal weapon development. These programs are developing and integrating hardware and software for utilization by Marine Air-Ground Expeditionary Forces.



Non-lethal weapon development includes urban operations non-lethal and scalable technology, research in support of clearing facilities with novel technology, and non-lethal weaponization. These initiatives aim to minimize collateral damage to infrastructure and personnel, while neutralizing facilities and the threats that might be posed to these facilities and the personnel that occupy them. The committee notes that the Commandant of the Marine Corps identified a fiscal year 2005 unfunded requirement for continued development of non-lethal weapons. The committee believes that the Marine Corps must have a broad range of responses to contain and manage emerging threats before, during, and after conflict, and do so with minimum collateral damage. Therefore, the committee supports these initiatives.

The committee recommends the following:

- (1) an increase of \$6.4 million for the non-lethal weapons urban operations laboratory to expand the assessment, analysis, neutralization, and development of capabilities to ensure minimum environmental and collateral damage with nontraditional and traditional capabilities;
- (2) an increase of \$3.4 million to conduct research in support of clearing facilities with novel technology; and
- (3) an increase of \$2.9 million for non-lethal technology weaponization to conduct additional research, education and training to meet the goals of modern non-lethal and scalable options for Marine Corps forces deployed around the world.

The committee notes that the recent Marine Corps' decision to procure the Improved Target Acquisition System to meet the Anti-Armor Weapon System-Heavy (AAWS-H) requirement did not allow the Marine Corps sufficient time to request fiscal year 2005 funding to support the effort. The Marine Corps has provided information to this committee that indicates this initiative will be addressed in the fiscal year 2006 budget submission. The committee understands that not funding this program in fiscal year 2005 will delay the procurement and fielding of a critical combat capability by a year. Therefore, the committee recommends an increase of \$4.0 million for the continued development of the AAWS-H weapon system.

The committee recommends a total authorization of \$39.1 million in PE 63635M.

#### **Marine mammal detection and mitigation**

The budget request included \$24.6 million in PE 63721N for environmental protection. The committee recommends an increase of \$3.0 million in PE 63721N for marine mammal detection and mitigation. The committee notes that this research will accelerate research and development of a prototype system that will detect the presence of marine mammals. With such a system, scientists will be able to track marine mammal movement using the data collected and help create a better understanding of marine mammal migration routes, population densities, and habits. Such a system will help the Navy to conduct active sonar training, while mitigating biologically significant disruptions to marine mammals.

### **Uninterruptible fuel cell**

The budget request included \$1.5 million in PE 63724N for the Navy energy program, but included no funding to demonstrate proton exchange membrane (PEM) fuel cell designs at Department of the Navy installations. The Navy is tri-service lead for the implementation of renewable and alternative energy systems across the entire Department of Defense.

Reliable electric power is important for providing continuing operations at key operating facilities. Microprocessor operations are particularly sensitive to short interruptions. A potential way of dealing with the problem on a facility-wide basis, rather than piecemeal, would be to supply loads through uninterruptible substations that could respond within a few milliseconds to outages. The committee understands that such a substation with appropriate response times could be feasible by developing proton exchange membrane (PEM) fuel cell designs. The committee recommends an increase of \$3.0 million in PE 63724N to demonstrate the technical and economic viability of a set of PEM fuel cells and control unit in daily operation of a reliable, uninterruptible distributed generator at a power sensitive Navy facility.

### **Affordable weapons system**

The budget request included \$82.0 million in PE 63795N for land attack technology, including \$28.9 million for the continued development of the affordable weapons system (AWS). The AWS is a commercial off-the-shelf (COTS) based land attack and strike missile that can loiter and be directed to the target by either the shooter or a forward observer.

Budget briefings provided by the Navy to the committee indicate that there is no validated requirement for the AWS, and that AWS is not a Navy program of record. Funds appropriated for the system in fiscal year 2004 are intended to be used to determine the feasibility of transitioning AWS from a technology demonstration to a program, with a decision point on whether or not to proceed with AWS as a program by the end of fiscal year 2005. In outlining the top concerns with AWS, the Navy included the following: (1) fiscal year 2003 initiatives have not been completed as of March 2004; (2) the technical maturity of AWS had not been demonstrated; and (3) whether the capability meets naval requirements or needs has not been determined. The committee also notes that AWS funding is not included in Navy budget documentation in the Future Years Defense Program.

The committee believes that further funding of AWS in fiscal year 2005 is premature, until the Navy decides on whether to pursue AWS as a program of record. Since the Navy believes this evaluation can be made with funds appropriated in prior years, the committee recommends a decrease of \$28.9 million in PE 63795N for the AWS, for a total authorization of \$53.1 million.

### **AH-1Z attack helicopter upgrade**

The budget request included \$90.4 million in PE 64245N, for the H-1 helicopter upgrade program. The H-1 upgrade program is currently in the engineering and manufacturing design phase with five remanufactured aircraft, including two AH-1Z attack helicopters

flying developmental test flights concentrating on handling qualities and envelope expansion.

The committee understands that during developmental flight testing, the AH-1Z aircraft experienced increased infrared signature and higher than expected structural stress due to engine exhaust hitting the tail boom. The Marine Corps has been working to reduce the infrared signature of the helicopter to increase helicopter survivability. Currently, a turned exhaust design is being developed as part of Operation Iraqi Freedom aviation survivability equipment. The committee notes that the turned exhaust design reduces the aircraft's overall infrared signature, and will greatly increase survivability, according to the Marine Corps. The committee recommends an increase of \$42.0 million for the continued development of a turned exhaust system for the AH-1Z helicopter upgrade, for a total authorization of \$132.4 million in PE 64245N.

#### **Joint helmet mounted cueing system**

The budget request included \$8.8 million in PE 64264N for aircrew systems developments, but included no funding for the continued development of the joint helmet mounted cueing system (JHMCS). The JHMCS is currently in use by the Navy and the Air Force, but is not equipped with a night vision capability. The JHMCS enables aircrews to designate and train weapon sensors on air and land targets through turning their head instead of maneuvering their aircraft. It also enhances survivability in lethal threat environments by allowing the aircrew to be focusing outside of the cockpit. The potential to expand this capability to night operations exists by using a quad-eye night vision device, which the Navy intends to test in fiscal year 2004. The committee recommends an increase of \$4.0 million in PE 64264N for the development of the JHMCS quad-eye.

#### **VXX executive helicopter development**

The budget request included \$777.5 million in PE 64273N, for the development of the VXX executive helicopter. In December 2003, the Department of the Navy issued a Request For Proposal for a platform to replace the current fleet of presidential helicopters. The intent was to award a Systems Development and Demonstration (SDD) contract by May 2004 for the replacement platform. On March 23, 2004, the Navy announced its decision to extend the source selection schedule in an effort to pursue additional risk reduction and to discuss the technological maturity of the competing bids for the program. The committee was informed that source selection would occur in January 2005. The committee fully supports this program, but believes that existing fiscal year 2004 funding and requested fiscal year 2005 funding can not be fully executed, given this delay in source selection. Therefore, the committee recommends a reduction of \$145.0 million in PE 64273N, to reflect a three month fiscal year 2005 delay in the development of the VXX executive helicopter.

#### **Standard missile improvements**

The budget request included \$99.0 million in PE 64366N for various Standard Missile improvements.

The budget included no funding for technologies to make Standard Missiles more resistant to external stimuli, such as shipboard fires or explosions. Mature missile systems, such as the Standard Missile, do not include the latest insensitive munitions (IM) technologies that would increase the weapon's ability to avoid unintended detonations. The committee believes that the Navy should incorporate these newer IM technologies in the Standard Missile product line, particularly as the Navy begins development of a new, extended range version of the Standard Missile, the SM-6. The committee recommends an increase of \$5.0 million in PE 64366N to develop IM technology for the Standard Missile.

The SM-6 is intended to engage targets at longer ranges than the currently available Standard Missile variants. This fact, in addition to the likely presence of jamming or a more severe electromagnetic environment, will require that the SM-6 missile have a more robust data link. The committee recommends an increase of \$5.0 million in PE 64366N to develop an improved data link for the Standard Missile family.

#### **Airborne mine countermeasures**

The budget request included \$50.5 million in PE 64373N for airborne mine countermeasures, but included no funding for the development of the surface Navy integrated undersea tactical technology (SNIUTT) simulator. Funds for this program would allow the addition of a scenario-based simulation refresher training capability for postmission analysis for airborne mine countermeasure sonars. This simulator would utilize recorded sonar data to provide interactive training to sonar operators in recognizing and classifying sonar contacts. The committee recommends an increase of \$3.0 million in PE 64373N for development of the SNIUTT simulator.

#### **Submarine system development**

The budget request included \$75.4 million in PE 64503N, for submarine systems development, including \$25.6 million for various submarine integrated antenna systems developments. The budget request did not include funding for the Small Business Innovative Research (SBIR) phase III project for an advanced processor build.

Submarines operate at a disadvantage in trying to fully participate in the Navy's efforts to implement network centric warfare. Submarines must have access to higher data rate communications than are currently available.

One near-term solution could involve using an expendable two-way satellite communications buoy operating in the ultra high frequency (UHF) portion of the electromagnetic spectrum. An approach that would employ fiber optic links between the submarine and a communications buoy could be compatible with existing buoy launcher systems. A longer-term approach would require extending communications capability to other portions of the electromagnetic spectrum. A tethered platform could provide such connectivity, and could be used to achieve better situational awareness by employing such sensor technologies as photonics, electronic support measures and acoustics. Such a tethered platform could also take advantage

of existing towed buoy handling mechanisms already installed on submarines. The committee recommends an increase of \$4.0 million in PE 64503N, to pursue these developments.

The committee has confirmed with the Navy that the budget request of \$10.0 million for the SBIR phase III project for the advanced processor build should be funded in PE 64503N, instead of PE 63582N. Therefore, the committee recommends an increase of \$10.0 million in PE 64503N, for the advanced processor build.

The committee recommends a total authorization of \$89.4 million in PE 64503N.

### **Shipboard aviation systems**

The budget request included \$28.6 million in PE 64512N for shipboard aviation systems, but included no funding for the development of an arresting cable made from synthetic material. The strength to weight ratio of synthetic materials is four to five times better than steel, resulting in reduced inertia and allowing the arresting gear to apply braking force much earlier in the landing. The committee recommends an increase of \$2.5 million in PE 64512N for the development of synthetic arresting cable.

### **Virginia-class submarine development**

The budget request included \$143.3 million in PE 64558N for continuing development of the *Virginia*-class submarine. This includes the technology, prototype components, and systems engineering needed to design and construct the submarine and its command, control, communications and intelligence system. The budget request included no funding for information assurance. The committee recommends an increase of \$2.0 million in PE 64558N for *Virginia*-class submarine information assurance.

The budget request included no funding to develop the multi-mission module concept for the *Virginia*-class submarine. The committee believes the flexibility that this concept brings to the platform is essential, and recommends an increase of \$56.0 million in PE 64558N for the multi-mission module.

The budget request included no funding to develop a large aperture bow array for the *Virginia*-class submarine. This array has the potential to increase sonar system performance at a lower cost than the current spherical array. The committee recommends an increase of \$5.0 million in PE 64558N for the development of a large aperture bow array.

The budget request included no funding for the common submarine radio room (CSRR). This effort was initiated as part of the *Virginia*-class submarine, and is now expected to be used across all submarine classes. The Chief of Naval Operations has included the CSRR on his Unfunded Priority List. The committee recommends an increase of \$13.1 million in PE 64558N for the development of CSRR.

The committee recommends a total authorization of \$219.4 million in PE 64558N.

### **Submarine tactical warfare systems**

The budget request included \$43.4 million in PE 64562N for submarine tactical warfare systems development. This program devel-

ops commercial off-the-shelf (COTS)-based software and hardware upgrades to integrate improved weapons and tactical control capabilities for all submarine classes. Among the goals of this development program is to provide fleet-wide improvements to submarine combat systems that reduce ownership costs, ease and enhance training, and ensure that the fleet has positive control over weapons and maintenance functions while underway.

The committee believes that the Navy should accelerate these efforts and expand them to include architecture upgrades and applications that would benefit the Navy and the fleet. The committee recommends an increase of \$6.0 million in PE 64562N to establish a program to pursue these developments.

#### **Anti-terrorism technology surveillance system**

The budget request included \$18.0 million in PE 64721N for the battle group passive horizon extension system, but included no funding for the anti-terrorism technology surveillance system (ATTSS). The ATTSS enhances the capability of the mobile inshore undersea warfare system upgrade, which provides surface and sub-surface surveillance. The ATTSS provides low-cost detection and geolocation sensors, using commercial off-the-shelf technologies. The committee recommends an increase of \$3.0 million in PE 64721N for ATTSS.

#### **Directed energy user scrutiny equipment**

The budget request included \$48.2 million in PE 64755N for ship self-defense detection and control systems improvements. Of this amount, the Navy has requested \$3.0 million for shipboard systems for conducting force protection operations.

The Air Force has been sponsoring an advanced concept technology demonstration (ACTD) program to employ millimeter wave electromagnetic energy as an active denial mechanism.

The committee believes that the Navy might be able to integrate such less-than-lethal directed energy technology in the integrated radar optical sighting and surveillance system (IROS3). Integrating such capability within the Navy systems could greatly increase options for Navy teams conducting the force protection mission.

Therefore, the committee recommends an increase of \$5.0 million in PE 64755N to establish a program to begin packaging of the ACTD technology in IROS3 and evaluate whether such a system would be effective within the maritime environment.

#### **NULKA anti-ship missile decoy development**

The budget request included \$28.2 million in PE 64757N for development of soft kill technologies for ship self-defense, but included no funding for continued improvement of the NULKA anti-ship missile decoy system. Anti-ship missile guidance systems are being developed which operate in new radio frequency bands or are employing multi-mode seekers, using infrared terminal guidance. The committee recommends an increase of \$5.0 million in PE 64757N for development of improvements for the NULKA decoy.

### **Sea rescue technologies**

The budget request included \$6.9 million in PE 64771N for medical development. The committee recommends an increase in PE 64771N of \$3.0 million for accelerated deployment of sea rescue equipment that automatically activates; is visible from the air; and decreases rescue times for injured personnel.

### **Joint strike fighter lift fan study**

The budget request includes \$2.2 billion in PE 64800N for the continuing development of the joint strike fighter (JSF). The JSF program has recently experienced setbacks in both cost and schedule for the system design and development phase, largely due to the fact that all three variants are currently projected to be over weight targets for this stage of the developmental effort. This weight problem is particularly critical for the short takeoff and vertical landing (STOVL) variant of the aircraft.

The committee is particularly concerned about one of the potential technical approaches under consideration to solve this problem. Increasing engine thrust could have detrimental effects in the area of reliability and engine life. To ensure this effort is adequately funded and the effects are fully understood, the committee recommends an increase of \$15.0 million in PE 64800N for the investigation of increasing thrust on the JSF lift fan.

### **Navy management**

The budget request included \$66.1 million in PE 65861N for Navy science and technology management. The committee recommends a reduction in PE 65861N of \$3.8 million due to unjustified program growth over the last three years.

### **Thin plate pure lead battery technology**

The budget request included \$108.8 million in PE 11221N for strategic submarine and weapons system support, but no funding for thin plate pure lead (TPPL) battery technology.

The committee is aware of ongoing research to apply well-understood TPPL technology to submarine batteries. This technology has the potential to increase submarine battery energy density; reduce corrosion and associated maintenance costs; and improve life span, performance, reliability, output, and recovery from deep discharges.

Therefore, the committee recommends an increase in PE 11221N of \$5.0 million for research and development for thin plate pure lead battery technology.

### **Precision terrain aided navigation**

The budget request included \$28.8 million in PE 24229N for the Tomahawk weapons system, but included no funding for further development of precision terrain-aided navigation (PTAN). The PTAN offers an alternative guidance system to the Tomahawk cruise missile should Global Positioning System signals be lost through jamming. The committee recommends an increase of \$5.0 million in PE 24229N for the continued development of PTAN.

### **Corrosion inhibiting coatings**

The budget request included \$62.6 million in PE 25633N for aviation improvements, but included no funding for the continued development of corrosion inhibiting coatings. Navy aircraft operate in a highly corrosive environment, and maintenance personnel have to devote many hours to corrosion control. The development of corrosion inhibiting coatings could increase aircraft availability, while easing the burden on maintenance personnel. The committee recommends an increase of \$4.0 million in PE 25633N for the development of corrosion inhibiting coatings.

### **Battlefield management system**

The budget request included \$10.7 million in PE 26623M, for the development of combat service support equipment. The committee understands the Marine Corps is currently exploring ways to reduce operator and system interfaces in armored fighting vehicles by using: (1) integrated battle management information, (2) fire control information, (3) terrain and map information, and (4) platform sensor data into a single common operational picture. The committee understands the Marine Corps is supporting a proof-of-concept demonstration for this system. The committee recommends an increase of \$2.0 million in PE 26623M for development of a battlefield management system, for a total authorization of \$12.7 million.

### **Cobra Judy replacement**

The budget request included \$80.7 million in Research, Development, Test and Evaluation, Navy, for the Cobra Judy program. This level of funding sustains the important developmental effort associated with the Cobra Judy program to field a replacement platform in 2012, but does not fully restore funding to complete the development effort.

The Cobra Judy is a shipborne intelligence collection system that is an important part of the intelligence collection, treaty verification, and ballistic missile defense capabilities of the U.S. government. The unique capabilities of the Cobra Judy, combined with its ability to provide lengthy coverage of areas of interest, make it an indispensable part of the nation's overall intelligence collection capabilities.

The committee is concerned that complementary developmental activities in the Navy, the Missile Defense Agency, and the Intelligence Community are not being fully coordinated to ensure the development of a comprehensive measurement and signatures intelligence (MASINT) system that supports the intelligence needs of national decision makers; the missile warning requirements of ballistic missile defense systems; and, the operational needs of the Navy. Each of these organizations is developing capabilities for core requirements that also can provide support and reinforcing capabilities for the other. The committee urges the Secretary of Defense to review the radar developmental activities associated with the Cobra Judy, the Navy's DD(X) program, and ballistic missile defense to ensure the integration of complementary capabilities, the development of integrated operational procedures, and the elimination of unnecessary redundancy.



The committee recommends an increase of \$13.0 million in PE 35149N, to restore the funding necessary to complete developmental activities associated with the Cobra Judy replacement program.

**Modeling and simulation research**

The budget request included \$7.3 million in PE 38601N for modeling and simulation support. The committee recommends an increase in PE 38601N of \$9.0 million for modeling and simulation research to ensure that the Joint Forces Command has access to state-of-the-art modeling, simulation, and wargaming capabilities for a wide range of scenarios, including urban warfare; integration with coalition forces; and simulations of weapons of mass destruction, including civilian support capabilities.

**Air Force**

**Title II-RDT and E**  
(Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
			<b>RESEARCH, DEVELOPMENT, TEST &amp; EVALUATION, AIR FORCE</b>			
3600	0601102F	1	DEFENSE RESEARCH SCIENCES	217,304	10,000	227,304
			Information assurance research		[3,000]	
			Logistics research		[2,000]	
			Advanced research in quantum information technology		[2,000]	
			Nanomaterials research		[3,000]	
3600	0601103F	2	UNIVERSITY RESEARCH INITIATIVES	115,865	16,600	132,465
			Photonics research		[1,600]	
			Nano- and micro-electromechanical research		[2,500]	
			Information security research		[2,500]	
			SMART Defense scholarship pilot program		[10,000]	
3600	0601108F	3	HIGH ENERGY LASER RESEARCH INITIATIVES	12,331		12,331
3600	0602102F	4	MATERIALS	73,660	3,400	77,060
			Composite materials research for unmanned structures		[1,500]	
			Blast resistant barriers		[1,900]	
3600	0602201F	5	AEROSPACE VEHICLE TECHNOLOGIES	74,679		74,679
3600	0602202F	6	HUMAN EFFECTIVENESS APPLIED RESEARCH	71,483	5,000	76,483
			Battlefield air operations technology		[5,000]	
3600	0602203F	7	AEROSPACE PROPULSION	92,650	10,000	102,650
			Hypersonics research (X-43C)		[10,000]	
3600	0602204F	8	AEROSPACE SENSORS	78,804	5,000	83,804
			Super-resolution Sensor System		[3,000]	
			Three-dimensional microelectronics development		[2,000]	

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3600	0602500F	9	MULTI-DISCIPLINARY SPACE TECHNOLOGY	84,581		84,581
3600	0602601F	10	SPACE TECHNOLOGY	88,909	11,000	99,909
			Elastic memory composite research		[3,000]	
			Foldable space structures		[3,000]	
			Hyperspectral technology		[5,000]	
3600	0602602F	11	CONVENTIONAL MUNITIONS	52,251		52,251
3600	0602605F	12	DIRECTED ENERGY TECHNOLOGY	36,532		36,532
3600	0602702F	13	COMMAND CONTROL AND COMMUNICATIONS	82,147	1,000	83,147
			Joint battlespace infosphere		[1,000]	
3600	0602803F	14	DUAL USE SCIENCE AND TECHNOLOGY PROGRAM	5,151		5,151
3600	0602890F	15	HIGH ENERGY LASER RESEARCH	45,333		45,333
3600	0603112F	16	ADVANCED MATERIALS FOR WEAPON SYSTEMS	34,284	7,000	41,284
			Metals and aerospace alloys		[7,000]	
3600	0603203F	17	ADVANCED AEROSPACE SENSORS	30,634	4,000	34,634
			Advanced sensors		[4,000]	
3600	0603205F	18	FLIGHT VEHICLE TECHNOLOGY			
3600	0603211F	19	AEROSPACE TECHNOLOGY DEV/DEMO	29,145	2,000	31,145
			Photonics technology		[2,000]	
3600	0603216F	20	AEROSPACE PROPULSION AND POWER TECHNOLOGY	79,914	8,000	87,914
			Advanced turbine engine gas generators		[5,000]	
			Turbine engine program		[3,000]	
3600	0603231F	21	CREW SYSTEMS AND PERSONNEL PROTECTION TECHNOLOGY	32,794	-5,000	27,794
			Decision support cognitive systems		[-5,000]	
3600	0603270F	22	ELECTRONIC COMBAT TECHNOLOGY	28,282		28,282

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3600	0603311F	23	BALLISTIC MISSILE TECHNOLOGY			
3600	0603333F	24	UNMANNED AIR VEHICLE DEV/DEMO			
3600	0603401F	25	ADVANCED SPACECRAFT TECHNOLOGY	60,124	27,000	87,124
			AC coupled interconnect		[5,000]	
			Hardening technologies for satellites		[7,000]	
			Thin film amorphous solar arrays		[7,000]	
			Boron energy cell technology		[5,000]	
			Intelligent free space optical satellite communications node		[3,000]	
3600	0603444F	26	MAUI SPACE SURVEILLANCE SYSTEM (MSSS)	6,306	10,000	16,306
			High accuracy network determination system		[10,000]	
3600	0603500F	27	MULTI-DISCIPLINARY ADVANCED DEVELOPMENT SPACE TECHNOLOGY	51,114	5,000	56,114
			Laser threat warning attack reporting for space		[5,000]	
3600	0603601F	28	CONVENTIONAL WEAPONS TECHNOLOGY	22,398	3,000	25,398
			Low Cost Autonomous Attack System		[3,000]	
3600	0603605F	29	ADVANCED WEAPONS TECHNOLOGY	31,103		31,103
3600	0603723F	30	ENVIRONMENTAL ENGINEERING TECHNOLOGY			
3600	0603789F	31	C3I ADVANCED DEVELOPMENT	28,524		28,524
3600	0603801F	32	SPECIAL PROGRAMS	320,503		320,503
3600	0603850F	33	INTEGRATED BROADCAST SERVICE	2,294		2,294
3600	0603924F	34	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	8,547		8,547
3600	0207423F	35	ADVANCED COMMUNICATIONS SYSTEMS	12,051		12,051
3600	0401840F	36	AMC COMMAND AND CONTROL SYSTEM	6,038		6,038
3600	0804757F	37	JOINT NATIONAL TRAINING CENTER	2,939		2,939
3600	0603260F	38	INTELLIGENCE ADVANCED DEVELOPMENT	4,612		4,612

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Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
3600	0603287F	39	PHYSICAL SECURITY EQUIPMENT	22,640		22,640
3600	0603421F	40	NAVSTAR GLOBAL POSITIONING SYSTEM III	40,568		40,568
3600	0603430F	41	ADVANCED EHF MILSATCOM (SPACE)	612,049		612,049
3600	0603432F	42	POLAR MILSATCOM (SPACE)	960		960
3600	0603434F	43	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE			
3600	0603438F	44	SPACE CONTROL TECHNOLOGY	15,046		15,046
3600	0603742F	45	COMBAT IDENTIFICATION TECHNOLOGY	19,582		19,582
3600	0603790F	46	NATO RESEARCH AND DEVELOPMENT	3,930		3,930
3600	0603791F	47	INTERNATIONAL SPACE COOPERATIVE R&D	552		552
3600	0603845F	48	TRANSFORMATIONAL SATCOM (TSAT)	774,836	-100,000	674,836
			TSAT program risk		[-100,000]	
3600	0603850F	49	INTEGRATED BROADCAST SERVICE	23,927		23,927
3600	0603851F	50	INTERCONTINENTAL BALLISTIC MISSILE	72,503		72,503
3600	0603854F	51	WIDEBAND GAFILLER SYSTEM RDT&E (SPACE)	73,499		73,499
3600	0603856F	52	AIR FORCE/NATIONAL PROGRAM COOPERATION (AFNPC)			
3600	0603858F	53	SPACE-BASED RADAR	327,732		327,732
3600	0603859F	54	POLLUTION PREVENTION	2,692		2,692
3600	0603860F	55	JOINT PRECISION APPROACH AND LANDING SYSTEMS	18,385		18,385
3600	0604015F	56	NEXT GENERATION BOMBER			
3600	0604327F	57	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS) PROGRAM	6,383		6,383
3600	0604731F	58	UNMANNED COMBAT AIR VEHICLE (UCAV)			
3600	0604855F	59	OPERATIONALLY RESPONSIVE LAUNCH	35,362	7,500	42,862
			Operationally responsive launch		[7,500]	
3600	0604856F	60	COMMON AERO VEHICLE (CAV)	21,610		21,610

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
3600	0305178F	61	NATIONAL POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITE	307,668		307,668
3601	0603840F	62	GLOBAL BROADCAST SERVICE (GBS)	33,447		33,447
3600	0604012F	63	JOINT HELMET MOUNTED CUEING SYSTEM (JHMCS)	2,867		2,867
3600	0604222F	64	NUCLEAR WEAPONS SUPPORT	13,301		13,301
3600	0604226F	65	B-1B	59,462	20,000	79,462
			B-1 data link and FLIR upgrades		[20,000]	
3600	0604233F	66	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	3,359		3,359
3600	0604239F	67	F-22	210,000		210,000
3600	0604240F	68	B-2 ADVANCED TECHNOLOGY BOMBER	245,049		245,049
3600	0604270F	69	ELECTRONIC WARFARE DEVELOPMENT	138,393	14,700	153,093
			PLAID		[14,700]	
3600	0604280F	70	JOINT TACTICAL RADIO	49,856		49,856
3600	0604287F	71	PHYSICAL SECURITY EQUIPMENT	9,744		9,744
3600	0604329F	72	SMALL DIAMETER BOMB (SDB)	76,489		76,489
3600	0604421F	73	COUNTERSPACE SYSTEMS	75,863	5,000	80,863
			Space control test capabilities		[5,000]	
3600	0604435F	74	ADVANCED POLAR MILSATCOM			
3600	0604441F	75	SPACE BASED INFRARED SYSTEM (SBIRS) HIGH EMD	508,448	35,000	543,448
			SBIRS development		[35,000]	
3600	0604479F	76	MILSTAR LDR/MDR SATELLITE COMMUNICATIONS (SPACE)	1,380		1,380
3600	0604600F	77	MUNITIONS DISPENSER DEVELOPMENT	28,048		28,048
3600	0604602F	78	ARMAMENT/ORDNANCE DEVELOPMENT	8,353		8,353
3600	0604604F	79	SUBMUNITIONS	4,824		4,824
3600	0604617F	80	AGILE COMBAT SUPPORT	10,053		10,053

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3600	0604618F	81	JOINT DIRECT ATTACK MUNITION			
3600	0604706F	82	LIFE SUPPORT SYSTEMS	6,630		6,630
3600	0604731F	83	UNMANNED COMBAT AIR VEHICLE (UCAV)			
3600	0604733F	84	COMBAT TRAINING RANGES	18,714		18,714
3600	0604740F	85	INTEGRATED COMMAND & CONTROL APPLICATIONS (IC2A)	258		258
3600	0604750F	86	INTELLIGENCE EQUIPMENT	1,349		1,349
3600	0604754F	87	TACTICAL DATA LINK INFRASTRUCTURE			
3600	0604762F	88	COMMON LOW OBSERVABLES VERIFICATION SYSTEM (CLOVERS)	10,303		10,303
3600	0604800F	89	JOINT STRIKE FIGHTER (JSF)	2,307,420		2,307,420
3600	0604851F	90	INTERCONTINENTAL BALLISTIC MISSILE	91,687		91,687
3600	0604853F	91	EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE)	27,000		27,000
3600	0605011F	92	RDT&E FOR AGING AIRCRAFT	15,665		15,665
3600	0207131F	93	A-10 SQUADRONS			
3600	0207256F	94	UNMANNED COMBAT AIR VEHICLE JOINT PROGRAM OFFICE	2,911		2,911
3600	0207434F	95	LINK-16 SUPPORT AND SUSTAINMENT	141,012		141,012
3600	0207443F	96	FAMILY OF INTEROPERABLE OPERATIONAL PICTURES (FIOP)	44,947		44,947
3600	0207450F	97	MULTI-SENSOR C2 AIRCRAFT (MC2A)	538,860	-40,000 [-40,000]	498,860
			Reduction - MC2A (late delivery of test bed aircraft)			
3600	0207701F	98	FULL COMBAT MISSION TRAINING	5,894		5,894
3600	0305176F	99	COMBAT SURVIVOR EVADER LOCATOR			
3600	0401318F	100	CV-22			
3600	0604256F	101	THREAT SIMULATOR DEVELOPMENT	16,439		16,439
3600	0604759F	102	MAJOR T&E INVESTMENT	34,517		34,517
3600	0605101F	103	RAND PROJECT AIR FORCE	58,933		58,933
				24,970		24,970

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Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
3600	0605306F	104	RANCH HAND II EPIDEMIOLOGY STUDY	4,813		4,813
3600	0605502F	105	SMALL BUSINESS INNOVATION RESEARCH			
3600	0605712F	106	INITIAL OPERATIONAL TEST & EVALUATION	28,839		28,839
3600	0605807F	107	TEST AND EVALUATION SUPPORT	356,266		356,266
3600	0605860F	108	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	7,984	22,500	30,484
			Ballistic missile range safety technology		[15,000]	
			Microsatellite launch capability		[7,500]	
3600	0605864F	109	SPACE TEST PROGRAM (STP)	44,521		44,521
3600	0605976F	110	FACILITIES RESTORATION AND MODERNIZATION - TEST AND EVALUATION	58,936		58,936
3600	0605978F	111	FACILITIES SUSTAINMENT - TEST AND EVALUATION SUPPORT	23,067		23,067
3600	0804731F	112	GENERAL SKILL TRAINING	323		323
3600	0909900F	113	FINANCING FOR EXPIRED ACCOUNT ADJUSTMENTS			
3600	0909980F	114	JUDGMENT FUND REIMBURSEMENT	100,000		100,000
3600	1001004F	115	INTERNATIONAL ACTIVITIES	3,945		3,945
3600	0605024F	116	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	7,858		7,858
3600	0101113F	117	B-52 SQUADRONS	25,766		25,766
3600	0101120F	118	ADVANCED CRUISE MISSILE	7,740		7,740
3600	0101122F	119	AIR-LAUNCHED CRUISE MISSILE (ALCM)	11,837		11,837
3600	0101313F	120	STRAT WAR PLANNING SYSTEM - USSTRATCOM	23,391		23,391
3600	0101314F	121	NIGHT FIST - USSTRATCOM	4,987		4,987
3600	0101815F	122	ADVANCED STRATEGIC PROGRAMS	8,393		8,393
3600	0102326F	123	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION PROGRAM	19,047		19,047
3600	0203761F	124	WARFIGHTER RAPID ACQUISITION PROCESS (WRAP) RAPID TRANSITION FUND	24,935		24,935
3600	0207028F	125	JOINT EXPEDITIONARY FORCE EXPERIMENT			



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3600	0207131F	126	A-10 SQUADRONS	22,590	10,000	32,590
			A-10 propulsion modernization		[10,000]	
3600	0207133F	127	F-16 SQUADRONS	99,606		99,606
3600	0207134F	128	F-15E SQUADRONS	115,246	17,200	132,446
			F-15C/D radar block upgrade		[17,200]	
3600	0207136F	129	MANNED DESTRUCTIVE SUPPRESSION	16,976		16,976
3600	0207138F	130	F/A-22 SQUADRONS	354,528		354,528
3600	0207141F	131	F-117A SQUADRONS	29,661		29,661
3600	0207161F	132	TACTICAL AIM MISSILES	5,558		5,558
3600	0207163F	133	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	33,266		33,266
3600	0207224F	134	COMBAT RESCUE AND RECOVERY	12,342		12,342
3600	0207247F	135	AF TENCAP	10,673	5,000	15,673
			GPS jammer detection and locator system		[5,000]	
3600	0207248F	136	SPECIAL EVALUATION PROGRAM	199,040		199,040
3600	0207253F	137	COMPASS CALL	3,990		3,990
3600	0207268F	138	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	165,609		165,609
3600	0207277F	139	CSAF INNOVATION PROGRAM	1,879		1,879
3600	0207325F	140	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	45,777		45,777
3600	0207410F	141	AIR & SPACE OPERATIONS CENTER (AOC)	27,695		27,695
3600	0207412F	142	CONTROL AND REPORTING CENTER (CRC)	11,634		11,634
3600	0207417F	143	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	288,787		288,787
3600	0207423F	144	ADVANCED COMMUNICATIONS SYSTEMS	20,066		20,066
3600	0207424F	145	EVALUATION AND ANALYSIS PROGRAM			
3600	0207433F	146	ADVANCED PROGRAM TECHNOLOGY	249,391		249,391

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3600	0207438F	147	THEATER BATTLE MANAGEMENT (TBM) C4I	37,210		37,210
3600	0207445F	148	FIGHTER TACTICAL DATA LINK	50,976		50,976
3600	0207446F	149	BOMBER TACTICAL DATA LINK	120,256		120,256
3600	0207448F	150	C2ISR TACTICAL DATA LINK	25,441		25,441
3600	0207449F	151	COMMAND AND CONTROL (C2) CONSTELLATION	44,035		44,035
3600	0207581F	152	JOINT SURVEILLANCE/TARGET ATTACK RADAR SYSTEM (JSTARS)	89,247		89,247
3600	0207590F	153	SEBK EAGLE	23,159		23,159
3600	0207591F	154	ADVANCED PROGRAM EVALUATION	474,734		474,734
3600	0207601F	155	USAF MODELING AND SIMULATION	18,693		18,693
3600	0207605F	156	WARGAMING AND SIMULATION CENTERS	6,377		6,377
3600	0208006F	157	MISSION PLANNING SYSTEMS	136,701		136,701
3600	0208021F	158	INFORMATION WARFARE SUPPORT	7,230		7,230
3600	0208160F	159	TECHNICAL EVALUATION SYSTEM			
3600	0208161F	160	SPECIAL EVALUATION SYSTEM			
3600	0301310F	161	NATIONAL AIR INTELLIGENCE CENTER	[ ]		
3600	0301314F	162	COBRA BALL	[ ]		
3600	0301315F	163	MISSILE AND SPACE TECHNICAL COLLECTION	[ ]		
3600	0301324F	164	FOREST GREEN	[ ]		
3600	0301398F	165	MANAGEMENT HEADQUARTERS GDIP			
3600	0302015F	166	E-4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	11,172		11,172
3600	0303110F	167	DEFENSE SATELLITE COMMUNICATIONS SYSTEM (SPACE)			
3600	0303131F	168	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	33,183		33,183

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3600	0303140F	169	INFORMATION SYSTEMS SECURITY PROGRAM	79,625	8,000	87,625
			Cyber security research			
			Info systems security research		[5,000]	
3600	0303141F	170	GLOBAL COMBAT SUPPORT SYSTEM	18,637	[3,000]	18,637
3600	0303150F	171	GLOBAL COMMAND AND CONTROL SYSTEM	3,611	8,000	11,611
			Global awareness presentation system		[8,000]	
3600	0303401F	172	COMMUNICATIONS SECURITY (COMSEC)			
3600	0303601F	173	MILSATCOM TERMINALS	272,149		272,149
3600	0304111F	174	SPECIAL ACTIVITIES	[ ]		
3600	0304311F	175	SELECTED ACTIVITIES	[ ]		
3600	0305099F	176	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	7,291		7,291
3600	0305110F	177	SATELLITE CONTROL NETWORK (SPACE)	17,833	3,000	20,833
			Civil reserve space service		[3,000]	
3600	0305111F	178	WEATHER SERVICE	16,526		16,526
3600	0305114F	179	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATCALS)	7,371		7,371
3600	0305116F	180	AERIAL TARGETS	5,178		5,178
3600	0305128F	181	SECURITY AND INVESTIGATIVE ACTIVITIES	484		484
3600	0305142F	182	APPLIED TECHNOLOGY AND INTEGRATION	[ ]		
3600	0305148F	183	AIR FORCE TACTICAL MEASUREMENT AND SIGNATURE INTELLIGENCE (M.	7,905		7,905
3600	0305159F	184	DEFENSE RECONNAISSANCE SUPPORT ACTIVITIES (SPACE)	219,345		219,345
3600	0305160F	185	DEFENSE METEOROLOGICAL SATELLITE PROGRAM (SPACE)			
3600	0305164F	186	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE)	104,114		104,114
3600	0305165F	187	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL SEGMENT	148,344		148,344
3600	0305172F	188	COMBINED ADVANCED APPLICATIONS	[ ]		

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Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
3600	0305174F	189	SPACE WARFARE CENTER	411		411
3600	0305182F	190	SPACELIFT RANGE SYSTEM (SPACE)	47,253		47,253
3600	0305191F	191	PERSONNEL SECURITY INVESTIGATIONS PROGRAM - AIR FORCE	118,787		118,787
3600	0305193F	192	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	1,097		1,097
3600	0305202F	193	DRAGON U-2 (JMIP)	87,745		87,745
3600	0305205F	194	ENDURANCE UNMANNED AERIAL VEHICLES			
3600	0305206F	195	AIRBORNE RECONNAISSANCE SYSTEMS	55,464		55,464
3600	0305207F	196	MANNED RECONNAISSANCE SYSTEMS	13,283		13,283
3600	0305208F	197	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	21,232		21,232
3600	0305219F	198	PREDATOR UAV (JMIP)	81,346		81,346
3600	0305220F	199	GLOBAL HAWK UAV (JMIP)	336,159		336,159
3600	0305887F	200	INTELLIGENCE SUPPORT TO INFORMATION WARFARE	963		963
3600	0305906F	201	NCMC - TW/AA SYSTEM	64,822		64,822
3600	0305910F	202	SPACETRACK (SPACE)	161,838	10,700	172,538
			Air Force Space Surveillance System		[10,700]	
3600	0305911F	203	DEFENSE SUPPORT PROGRAM (SPACE)			
3600	0305913F	204	NUDET DETECTION SYSTEM (SPACE)	35,398		35,398
3600	0305917F	205	SPACE ARCHITECT	12,907		12,907
3600	0308601F	206	MODELING AND SIMULATION SUPPORT			
3600	0308699F	207	SHARED EARLY WARNING (SEW)	3,345		3,345
3600	0401115F	208	C-130 AIRLIFT SQUADRON	150,242		150,242
3600	0401119F	209	C-5 AIRLIFT SQUADRONS (IF)	332,982		332,982
3600	0401130F	210	C-17 AIRCRAFT (IF)	199,692		199,692
3600	0401132F	211	C-130J PROGRAM	36,305		36,305

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
3600	0401134F	212	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	73,684		73,684
3600	0401218F	213	KC-135S	1,079		1,079
3600	0401219F	214	KC-105	18,452		18,452
3600	0408011F	215	SPECIAL TACTICS / COMBAT CONTROL	1,067		1,067
3600	0702207F	216	DEPOT MAINTENANCE (NON-IF)	1,431		1,431
3600	0702806F	217	ACQUISITION AND MANAGEMENT SUPPORT	1,596		1,596
3600	0708011F	218	INDUSTRIAL PREPAREDNESS	38,012	4,500	42,512
			Aircraft batteries		[2,000]	
			Advanced nanomaterials research		[2,500]	
3600	0708012F	219	LOGISTICS SUPPORT ACTIVITIES			
3600	0708026F	220	PRODUCTIVITY, RELIABILITY, AVAILABILITY, MAINTAIN. PROG OFC (PRAV			
3600	0708611F	221	SUPPORT SYSTEMS DEVELOPMENT	50,238	7,000	57,238
			Modular fuel cell architecture development		[5,000]	
			Unmanned aging aircraft maintenance		[2,000]	
3600	0708612F	222	COMPUTER RESOURCES SUPPORT IMPROVEMENT PROGRAM (CRSIP)			
3600	0808716F	223	OTHER PERSONNEL ACTIVITIES	110		110
3600	0901212F	224	SERVICE-WIDE SUPPORT (NOT OTHERWISE ACCOUNTED FOR)			
3600	0901218F	225	CIVILIAN COMPENSATION PROGRAM	7,272		7,272
3600	0901538F	226	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	15,732		15,732
3600	XXXXXXXXXX 999		CLASSIFIED PROGRAMS	5,551,279		5,551,279
			Financial information systems		-11,500	-11,500
			<b>Total, RDT&amp;E Air Force</b>	<b>21,114,667</b>	<b>149,600</b>	<b>21,264,267</b>

### **Air Force basic research**

The budget request included \$217.3 million in PE 61102F for defense research sciences. The committee recommends an increase in PE 61102F of \$10.0 million to accelerate pursuit of basic Air Force research in information assurance, logistics, and materials. Of this amount, the committee recommends an increase of: \$3.0 million for information assurance research; \$2.0 million for logistics research to improve design, deployability, performance, and support of current and future weapons systems; \$2.0 million for quantum information technology; and \$3.0 million for nanomaterials research.

### **Air Force university research**

The budget request included \$115.9 million in PE 61103F for the Air Force University Research Initiatives program. Basic research performed by universities in support of Air Force missions continues to play a key role in addressing persistent and emerging needs in areas such as information and network security and education of future experts in the exploitation of defense-related multidisciplinary technologies. The committee recommends an increase in PE 61103F of \$16.6 million: \$2.5 million for information security research; \$1.6 million for photonics research; \$2.5 million for nano- and micro-electromechanical research to explore and exploit the growing strength of nanotechnology and interfaces for sensor, controller and guidance systems; and \$10.0 million to support the Science, Mathematics And Research for Transformation (SMART) Defense Scholarship Program.

### **Air Force materials**

The budget request included \$73.7 million in PE 62102F for materials research. The committee recognizes the continued importance of unmanned vehicles in today's battlefield, and the need for timely, cost-effective production of these systems. Unmanned vehicles require unique structures and materials. The committee recommends an increase in PE 62102F of \$1.5 million for composite research for manned and unmanned flight structures.

Another area of critical materials research involves new approaches to address the threat posed by conventional explosives. Currently, a wide variety of commercial and makeshift barricades are in use by the military to secure infrastructure and bases inside the U.S. and those on deployment. These barriers provide limited capability to stop large vehicles and are not designed to withstand a blast. The committee recommends an increase in PE 62102F of \$1.9 million for research on blast resistant barriers that would stop large vehicles, withstand explosions, protect infrastructure, and reduce injuries resulting from an attack.

### **Battlefield air operations technology**

The budget request included \$71.5 million in PE 62202F Human Effectiveness Applied Research. The committee recommends an increase in PE 62202F of \$5.0 million for Air Force unfunded requirements in the area of battlefield air operations. Research would focus on developing and assessing technologies and designs for effective information display, human-centered information operations, and experiments regarding crew station layouts and func-

tional integration, with the aim of improving command center efficiency.

### **Hypersonics research**

The budget request included \$92.7 million in PE 62203F for aerospace propulsion. The committee recommends that the Department of Defense continue the long-term aircraft and space access component of hypersonics engine research that was pursued in partnership with the National Aeronautics and Space Administration (NASA). The committee understands the Air Force need for a focus on immediate applications of hypersonics engine research, but believes missile applications are achievable in the nearer-term, without suspending work on longer-term aircraft and space access goals. The committee recommends an increase in PE 62203F of \$10.0 million specifically for continuation of the X-43C demonstrator. The Air Force partnership with NASA would develop and demonstrate new engine technologies and vehicles, capable of operating over a broad range of flight Mach numbers, to enable future high-speed and hypersonic weapons and aircraft. The committee believes that the future years X-43C, X-43B, and Falcon programs each have the potential to demonstrate significant capabilities required by hypersonic aircraft and space access systems. In addition, pursuit of the X-43C serves dual purposes; as a missile demonstrator and for aircraft applications that require a multiengine platform. The committee believes that the Air Force should renew the X-43C partnership with NASA, since both agencies have important long-term missions in space access that require hypersonic aircraft.

### **Aerospace sensors**

The budget request included \$78.8 million in PE 62204F for aerospace sensors. In order to assure reliable communications in the battlefield, the thermal and electrical performance of circuit packaging modules must match the performance of the radio frequency integrated circuits. The committee recommends an increase in PE 62204F of \$2.0 million for a three-dimensional microelectronics packaging approach for integrated circuits that lowers their size and weight and improves the electrical and thermal performance of packaged modules especially for radio frequency communication applications. In the area of advanced sensor research, the committee recommends an increase of \$3.0 million for super resolution sensors, which have the potential to result in new tactical surveillance and strike capabilities and could enhance the Air Force's ability to conduct command, control, intelligence, surveillance, and reconnaissance missions.

### **Space technology**

The budget request included \$88.9 million in PE 62601F for space technology. Advances in deployable boom architectures and the mechanisms that enable them to be autonomously erected in space have resulted in advances in the performance of lightweight deployable structures for spacecraft. New boom systems increase the capabilities and lower the mass of information gathering, antenna, sun shield and solar power systems. Technological advances

must be made to dramatically increase the capabilities of U.S. radar, reconnaissance, and communications spacecraft. Therefore, the committee recommends an increase in PE 62601F of \$3.0 million for elastic memory composite materials; \$3.0 million for foldable articulated structures for next generation spacecraft; and \$5.0 million for hyperspectral technology.

#### **Air Force command, control, and communications**

The budget request included \$82.1 million in PE 62702F for command, control, and communications. The committee recommends an increase in PE 62702F of \$1.0 million for the joint battlefield infosphere research program for additional development of computer and software technologies to distribute mission critical information to warfighters globally.

#### **Advanced materials for weapons systems**

The budget request included \$34.3 million in PE 63112F for advanced materials for weapons systems. The committee recommends an increase in PE 63112F of \$7.0 million for research on affordable metals and aerospace alloys. The committee notes that advances in these materials technologies and in the manufacturing processes used to produce them are critical to support future Air Force needs.

#### **Advanced aerospace sensors**

The budget request included \$30.6 million in PE 63203F for advanced aerospace sensors. The present need of special operations units for systems to detect, identify, and neutralize a threat, as well as detect and display the battlespace is critical for operators in urban environments. The committee recommends an increase in PE 63203F of \$4.0 million for remote sensing and building architecture reconstruction programs, which provide the warfighter with real time building layout displays, and assist in urban reconnaissance, surveillance, and target acquisition.

#### **Aerospace technologies and demonstrations**

The budget request included \$29.1 million in PE 63211F for aerospace technology development and demonstration. Electro-magnetic interference is a significant problem for aircraft systems. Protection methods currently in use involve extensive shielding, which adds weight, increases costs, and decreases performance. The committee recommends an increase in PE 63211F of \$2.0 million for the demonstration of photonic technology to address these challenges.

#### **Turbine engine program**

The budget request included \$79.9 million in PE 63216F for aerospace propulsion and power technology. The committee recommends an increase in PE 63216F of \$5.0 million for the integrated advanced turbine engine gas generator and \$3.0 million for Air Force unfunded priority research on the versatile, affordable, advanced turbine engine program to accelerate progress on improved fuel systems for high-speed and hypersonic flight.



### **Cognitive systems**

The budget request included \$32.8 million in PE 63231F for crew systems and personnel protection technology. Decision support and cognitive research projects are under exploration by several services and Department of Defense agencies. The committee recommends a reduction in PE 63231F of \$5.0 million and urges coordination with other similar projects and activities.

### **Advanced solar arrays**

The budget request included \$60.1 million in PE 63401F for advanced spacecraft technology, of which \$2.2 million is for development and evaluation of space conventional power generation technologies, such as advanced thin film solar cells.

The committee is aware of ongoing research on high specific power thin film multi-junction amorphous silicon arrays on flexible substrates for space applications. Such technology has the potential to produce solar arrays that are five times greater in specific power, five to ten times cheaper, three to five times lighter, require five times less stowed volume, and offer improved radiation resistance compared to current solar arrays.

In light of the promise of this technology, the committee believes that the requested funding is insufficient. The committee recommends an increase of \$7.0 million in PE 63401F for continued development of thin film multi-junction amorphous silicon arrays on flexible substrates for space applications.

### **Advanced spacecraft technology**

The budget request included \$60.1 million in PE 63401F for advanced spacecraft technology, but no funding for research on alternating current coupled interconnect (ACCI) technology.

The committee appreciates the importance of high processing rates on spacecraft to meet mission requirements. The committee is aware of ongoing research and development on ACCI technology, which is intended to achieve high-density, high-reliability electrical interconnects between computer chips, enabling such chips to exchange data at much higher rates than is currently possible. This technology shows promise for improving both performance and packaging of advanced chips.

The committee recommends an increase of \$5.0 million in PE 63401F for continued research on ACCI technology.

### **Boron energy cell technology**

The budget request included \$60.1 million in PE 63401F for advanced spacecraft technology, but no funding for boron energy cell technology.

The committee recognizes the importance of reliable and efficient power supplies for satellites, and is aware of ongoing research and development on boron energy cells that convert radioisotope emissions into electric power. Because these cells would be scalable and could be produced in various shapes and sizes, the committee believes that this technology has the promise to reduce the need for central power distribution systems and streamline satellite power system design and assembly.

The committee recommends an increase of \$5.0 million in PE 63401F for boron energy cell technology.

#### **Intelligent free space optical satellite communications node**

The budget request included \$60.1 million in PE 63401F for advanced spacecraft technology, but no funding for research and development on intelligent free space optical satellite communications nodes.

The committee notes that the Department of Defense is pursuing a number of acquisition efforts to meet growing demand for communications bandwidth. The committee is aware of ongoing research and development on intelligent and adaptive communications networks enabled by fiber optic transceivers and high speed multichannel free space laser communications transceivers. The committee believes that these technologies can help reduce the development risk for the transformational military satellite (TSAT) communications program by enhancing both radio frequency and laser communications and providing low-cost adaptive switching, and that additional funding is needed for development and space qualification.

The committee recommends an increase of \$3.0 million in PE 63401F for research and development for intelligent free space optical satellite communications nodes.

#### **Satellite protection technology**

The budget request included \$60.1 million in PE 63401F for advanced spacecraft technology, but no funding for hardening technologies for satellite protection (HTSP).

The committee remains concerned about the potential vulnerability of U.S. military and commercial satellites, particularly in light of the increasing reliance of the military on space assets and foreign efforts to develop the means to disrupt U.S. exploitation of those assets.

An effort to develop an integrated module to the standard Satellite Tool Kit for low-cost laser and radio frequency hardening techniques was initiated in fiscal year 2001. The committee believes that providing low-cost, standardized tools to satellite designers will allow measures to reduce vulnerability to be designed into satellites, rather than added on, thus minimizing cost and design changes.

The committee recommends an increase of \$7.0 million in PE 63401F to continue research and development on hardening technologies for satellite protection.

#### **High accuracy network determination system**

The budget request included \$6.3 million in PE 63444F for the Maui Space Surveillance program, but no funding for the high accuracy network determination system (HANDS).

HANDS is intended to develop a network of relatively low resolution optical sensor systems linked through a central high performance computing system to improve space situational awareness. The committee believes that improved space situational awareness will be important in reducing the vulnerability of U.S. space assets, and understands that additional funds for the HANDS project

could be used to operate the network, design and build upgraded optical sensors, and tie the sensors to the high performance computing system.

The committee recommends an increase of \$10.0 million in PE 63444F to continue HANDS research and development.

#### **Laser threat warning attack reporting**

The budget request included \$51.1 million in PE 63500F for multidisciplinary advanced development space technology, of which \$1.1 million is for the development of laser warning sensor technology.

The committee recognizes that U.S. space systems are potentially vulnerable to ground-based directed energy threats. The laser threat warning attack reporting program is intended to develop electro-optical sensors capable of detecting and characterizing laser radiation incident on space systems.

The committee recommends an increase of \$5.0 million in PE 63500F for the laser threat warning reporting development effort, to accelerate the development of electro-optical threat warning and attack reporting sensors.

#### **Low cost autonomous attack system**

The budget request included \$22.4 million in PE 63601F for conventional weapon technology, including \$7.0 million for technology related to the demonstration of the low cost autonomous attack system (LOCAAS). The objective of the LOCAAS program is to demonstrate an affordable, miniature, autonomous powered munition capable of searching, detecting, identifying, tracking, and destroying a broad-spectrum of fixed and mobile ground targets. The committee recommends an increase of \$3.0 million in PE 63601F for the continued development of LOCAAS.

#### **Transformational military satellite communications**

The budget request included \$774.8 million in PE 63845F for the transformational military satellite (TSAT) communications program.

The committee recognizes the increasing importance of communications to net-centric military operations, and remains committed to the development of systems that will provide substantial increases in bandwidth available to warfighters and the intelligence community. The TSAT effort is intended to develop a new communications architecture based on laser crosslinks, internet protocol packet switching, new security protocols, new ground terminals, and integration with a new ground communications network. TSAT is intended to provide bandwidth orders of magnitude greater than is available today. The first TSAT launch is now projected for fiscal year 2012.

The committee remains supportive of the TSAT effort, but concerned that the technical risks in the program are very high. The committee notes that the request is more than double the amount authorized and appropriated for this program in fiscal year 2004. The committee recommends a decrease of \$100.0 million in PE 63845F. The committee believes that the remaining amount authorized will allow the program to proceed vigorously with risk re-

duction activities, and that more moderate pacing of the program will ultimately lower risk and allow for more timely deployment.

### **Operationally responsive launch**

The budget request included \$35.4 million in PE 64855F for research and development of operationally responsive launch capabilities.

The committee believes that the development low-cost launch capabilities is critical to future U.S. military space capabilities. The committee notes that the two families of evolved expendable launch vehicles developed in the late 1990s were intended to reduce the cost of launch by 25–50 percent compared to legacy launch systems. This projection was based to a substantial degree on projections of a very large commercial launch market, which would allow the military to amortize launch infrastructure costs over a large number of launches. This commercial market never materialized, and consequently, military space launch remains extraordinarily expensive. The committee continues to believe that redundancy is key to assured access to space, but is concerned that the current structure of the launch industry may not be sustainable in the long term.

The committee notes that the operationally responsive launch program will develop near-term low-cost launch alternatives, but that the first test launch is not scheduled until fiscal year 2007 and only four test launches are scheduled through fiscal year 2009. The committee believes that additional funding could support an acceleration of the development and test schedule.

The committee recommends an increase of \$7.5 million in PE 64855F to accelerate the operationally responsive launch program.

### **B-1 bomber**

The budget request included \$59.5 million in PE 64226F for upgrades to the B-1B bomber, of which \$22.0 million is for research and development of a fully integrated data link (FIDL).

The committee notes that the B-1B bomber was used extensively in operations in Afghanistan and Iraq. The committee also notes that a FIDL will enhance the accuracy, tactical flexibility, and mission effectiveness of the B-1B, but that development and procurement of the FIDL is not scheduled to be completed until 2014. The committee is also aware that the Air Combat Command roadmap for B-1B upgrades includes a forward-looking infrared sensor toward the end of the decade that will provide improved target detection and targeting capability. The committee believes that additional funds to accelerate these upgrade efforts are justified.

The committee recommends an increase of \$20.0 million in PE 64226F for research and development of the FIDL and forward-looking infrared systems.

### **Electronic warfare development**

The budget request included \$138.4 million in PE 64270F for electronic warfare development, including \$18.0 million for the continued development of the precision location and identification (PLAID) upgrade to the ALR-69 radar warning receiver (RWR). This upgrade allows the RWR to precisely detect threats, at greater range and with greater accuracy than the existing AN/ALR-69.

The committee recommends an increase of \$14.7 million in PE 64270F for the continued development of AN/ALR-69 PLAID.

#### **Space control test capabilities**

The budget request included \$75.9 million in PE 64421F for Air Force counterspace systems.

U.S. national security space policy includes a requirement to develop, operate, and maintain space control capabilities to ensure freedom of action in space and to deny freedom of action in space to adversaries. The committee recognizes that further development of ground-based space control technologies, which take advantage of ongoing Army efforts, could contribute significant near-term capabilities to selectively negate adversary space-based assets.

The committee recommends an increase of \$5.0 million in PE 64421F for continued test and development of command and control capabilities for ground-based space control assets. The committee notes that U.S. space control efforts have focused on denying adversary access to space-based assets through reversible effects, and directs that these additional funds be applied consistent with that focus.

#### **Space-based infrared system**

The budget request included \$508.4 million in PE 64441F for development of the space-based infrared system (SBIRS).

When deployed, SBIRS will provide improved early-warning, missile defense, and technical intelligence capabilities. The committee notes that the SBIRS program has had persistent cost, schedule, and technical problems over the last several years of its development. Unexpected technical difficulties on the first SBIRS payload resulted in cost overruns and schedule delays. These problems and further technical difficulties have, in turn, resulted in a delay of at least a year in the first launch of a SBIRS satellite in geostationary orbit.

The committee notes that the Commander, U.S. Strategic Command, in testimony to the Strategic Forces Subcommittee, Committee on Armed Services of the Senate, indicated that continued progress in the SBIRS program “is absolutely essential” to his command, and the Under Secretary of the Air Force testified before the same subcommittee that technical challenges and schedule delays have resulted in a budget shortfall in the SBIRS program.

The committee remains supportive of the SBIRS program because of the critical nature of its mission. The committee recommends an increase of \$35.0 million in PE 64441F to help address the SBIRS budget shortfall, overcome development difficulties, and minimize the schedule delay. The committee directs that none of this recommended increase may be obligated or expended until the Secretary of Defense provides to the congressional defense committees a new analysis of alternatives for the early warning mission.

#### **Multi-sensor command and control aircraft**

The budget request included \$538.9 million in PE 27450F for the multi-sensor command and control aircraft (MC2A), including \$333.0 million for the MC2A testbed aircraft. The MC2A has re-

cently been designated the E-10A. The first testbed aircraft was to be delivered for modifications in December 2005, but this delivery has slipped to June 2006, as a result of a re-phasing of efforts after a year delay in the Milestone B decision. The committee recommends a decrease of \$40.0 million in PE 27450F since the testbed aircraft will not be available on the schedule projected when the budget request was submitted.

#### **Ballistic missile range safety technology**

The budget request included \$8.0 million in PE 65860F for the rocket systems launch program, but no funding for ballistic missile range safety technology (BMRST).

The committee recognizes that new technology holds significant promise to improve down range reentry support, increase launch support capability, lower range support costs, and improve range safety. BMRST is based on Global Positioning System signals and an inertial navigation system to track space launch vehicles. Because of its mobility, the system can be used to support launches from the Eastern and Western launch ranges (located at Cape Canaveral and Vandenberg Air Force Base, respectively), as well as others with varying trajectories, such as missile defense launches.

The committee recommends an increase of \$15.0 million in PE 65860F for BMRST, to expand system capability, provide downrange reentry support, and expedite full system certification at the Eastern Range.

#### **Rocket systems launch program**

The budget request included \$8.0 million in PE 65860F for the rocket systems launch program, but no funding for development of small, low-cost launch vehicles.

The committee believes that low-cost, tactically flexible launch alternatives for small payloads of about 200 pounds could provide warfighters with an important quick-reaction option to place militarily useful capabilities in low earth orbit. The committee believes that existing technology should allow a near-term demonstration of such a launch capability.

The committee recommends an increase of \$7.5 million in PE 65860F for research, development, and demonstration of a tactically flexible launch vehicle for microsatellites.

#### **A-10 aircraft propulsion improvements**

The budget request included \$22.6 million in PE 27131F for the continued development of the A-10 aircraft, but included no funding for development of A-10 propulsion improvements. The Air Force intends to operate this aircraft until fiscal year 2028, and aircrews have continued to rank propulsion as a major operational deficiency. The committee recommends an increase of \$10.0 million in PE 27131F to begin a propulsion modernization effort for the A-10 aircraft.

#### **F-15C/D aircraft radar upgrade**

The budget request included \$115.2 million in PE 27134F for development of F-15 squadrons, but did not include funds for continued upgrade of F-15C/D aircraft to the APG-63(V3) configuration.

This configuration would benefit F-15C/D aircraft with significant operational enhancements, while achieving a 500 percent improvement in reliability and an 800 percent reduction in the mobility footprint. This radar upgrade is included as the number one priority on the Air Force Chief of Staff's Unfunded Priority List. The committee recommends an increase of \$17.2 million in PE 27134F for development leading to the procurement of the APG-63(V3) radar for F-15C/D aircraft.

The committee recognizes that without radar upgrades such as the APG-63(V3), the F-15 will be unable to effectively perform its primary mission of counterair and homeland defense against cruise missiles and other future airborne threats. The committee expects that the Air Force will include F-15 radar upgrades in future budget requests.

#### **Global positioning system jammer detection and location system**

The budget request included \$10.7 million in PE 27247F for Air Force tactical exploitation of national capabilities, but no funding for the Global Positioning System Jammer Detection and Location System (JLOC).

The Global Positioning System (GPS) is a navigational satellite system central to U.S. warfighting capabilities. GPS provides signals for accurate navigation, and provides the technical basis for many of the precision guided weapons in the U.S. inventory. GPS satellites, however, transmit very low power signals that are susceptible to jamming.

The JLOC effort is developing a high gain advanced GPS receiver, database, predictive tool, and network interfaces that will provide the operational capability to detect, locate, and predict effects of GPS jamming signals. This capability will enhance situational awareness, mission tasking and mission planning, and help allow the warfighter to disregard, kill, or evade jammers. Flight testing of the system has begun, and the committee is aware of support for JLOC from the operational community. The committee is also aware that additional funds are required to integrate JLOC into space operations, initiate development of an all-source data fusion capability, integrate JLOC into mission planning tools, and initiate development of a JLOC tactical control station.

Therefore, the committee recommends an increase of \$5.0 million in PE 27247F for JLOC.

#### **Cybersecurity research**

The budget request included \$79.6 million in PE 33140F for information systems security research. Cybersecurity and information assurance are critical to national defense and represent a continued vulnerability. Network attacks from terrorists, foreign nations, and domestic hackers could compromise defense operations and endanger lives. The committee recommends an increase in PE 33140F of \$5.0 million for cybersecurity research to target vulnerabilities and create the technology base for the next generation of protection mechanisms and architectures.

### **Information systems security research**

The budget request included \$79.6 million in PE 33140F, for the Information Systems Security Program.

The committee notes that the nation's military and commercial information systems continue to be vulnerable to attack. While funding for defense information systems security has increased in recent years, the threat to these systems from other nations, terrorist groups, and hackers continues to grow. The committee is particularly aware of homeland security and homeland defense initiatives managed by the Air Force Research Laboratory (AFRL), in conjunction with National Security Agency (NSA) Centers of Excellence. In particular, AFRL, in conjunction with the Air Force Air Intelligence Agency (AIA), has been a leader in the development of improved methods to conduct cybersecurity attack exercises as a research tool and training process. Additionally, these cybersecurity exercises have been instrumental in identifying the legal and policy impediments to coordinating a smooth flow of information between the Department of Defense, federal, state, and local governments and industry. Therefore, the committee recommends an increase of \$3.0 million in PE 33140F, for these initiatives.

### **Global operations center**

The budget request included \$3.6 million in PE 35150F for research and development on the global command and control system, but no funding for improvements to the global operations center for U.S. Strategic Command.

The committee understands that horizontal integration of data from multiple intelligence, surveillance, and reconnaissance (ISR) sources is a significant priority for the Department of Defense and operational commands. This integration will help provide decision makers and warfighters with the information required for effective command and control. The committee notes that the Commander, U.S. Strategic Command, testified to the Strategic Forces Subcommittee, Committee on Armed Services of the Senate, on the shortfalls in such capability at U.S. Strategic Command. The committee recognizes that U.S. Strategic Command's command and control needs, spanning tactical, theater, and strategic operational levels, are uniquely challenging.

The committee believes that ongoing efforts to develop advanced display technologies can be used to provide U.S. Strategic Command a display system in a timely manner that will integrate multiple ISR sources. The committee recommends an increase of \$8.0 million in PE 35150F for a global awareness display system.

### **Civil reserve space service**

The budget request included \$17.8 million in PE 35110F for research and development related to the Air Force Satellite Control Network (AFSCN), but no funding for the civil reserve space service (CRSS).

The AFSCN provides tracking, telemetry, and control for U.S. military satellites. The committee notes that the antennas and equipment used for satellite tracking, telemetry and control (TT&C) are aging and increasingly difficult to sustain. Further, the



most recent Air Force analysis forecasts that some AFSCN antennas will operate at 96 percent capacity by 2006, a level that will start to jeopardize the ability of the Air Force to meet both routine and contingency requirements. The committee also notes that the AFSCN modernization program is substantially over budget and behind schedule. The CRSS effort is intended to demonstrate the feasibility of augmenting AFSCN capabilities with commercial satellite control antennas. The committee believes that commercial antennas for TT&C, available to the AFSCN, can provide important surge and contingency capability at modest cost. The committee supports continued test, development, and validation of AFSCN surge and augmentation capabilities.

Therefore, the committee recommends an increase of \$3.0 million in PE 35110F to continue research, development, and testing of CRSS.

#### **Space surveillance system**

The budget request included \$161.8 million in PE 35910F for space surveillance research and development, but no funding for upgrades to the Air Force Space Surveillance System (AFSSS) network of radars.

The AFSSS is a series of radars across the continental United States to detect low earth orbiting objects. The program was formerly managed by the Navy, and was transferred, without any associated out-year funds, to the Air Force in fiscal year 2003. The Navy awarded a contract for AFSSS upgrades in fiscal year 2003, but the funds for this contract have been withheld by the Office of the Secretary of Defense pending the outcome of a program review by the Air Force. The committee is aware that the Air Force believes that the AFSSS has high military value; that the system will reach the end of its useful life by the end of the decade; that the 1960s technology in the AFSSS is not sustainable; and that replacement of aging AFSSS sensors with S-band radars is needed to sustain U.S. space surveillance capabilities. The committee understands that the Air Force is currently defining the requirements for such an upgrade.

The committee notes that without additional funds, the AFSSS upgrades will be significantly delayed. The committee recommends an increase of \$10.7 million in PE 35910F to accelerate research and development of the AFSSS S-band upgrade.

#### **Industrial preparedness**

The budget request included \$38.0 million in PE 78011F for industrial preparedness. Rapid, low-cost, high-quality manufacturing and high production volume quantities of affordable nanomaterials are necessary for the advancement of nanoscience research and transition into capabilities for information assurance, force protection, and countless other applications. These materials are critical components of stronger, lighter-weight armor and composite structures. The committee recommends an increase in PE 78011F of \$2.5 million for advanced nanomaterials research for military applications.

The Air Force uses electrically rechargeable batteries to provide auxiliary electric power for a variety of uses, such as when the air-

craft is not operating, for emergency electric energy during operations and for engine starting. The committee recommends an increase in PE 78011F of \$2.0 million for process development for an aircraft battery component that would store 50 percent more power per unit weight, cost 25 percent less than current batteries, and would be easily disposable.

**Support systems development**

The budget request included \$50.2 million in PE 78611F for support systems development. The committee recommends an increase in PE 78611F of \$5.0 million for modular fuel cell architecture development, which would provide reliable power sources for stationary and mobile forces; and \$2.0 million for unmanned autonomous aging aircraft maintenance. This project will develop and demonstrate a teleoperated, modular, reconfigurable robotic device that operates inside fuel tanks of aging aircraft to remove old and apply new coatings.

**Defense-wide**

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
			RESEARCH, DEVELOPMENT, TEST & EVALUATION, DEFENSE-WIDE			
0400	0601101D&Z	1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH			
0400	0601101E	2	DEFENSE RESEARCH SCIENCES	143,729	7,500	151,229
			Molecular electronics		[2,500]	
			Infectious disease research		[2,000]	
			Nanophotonics systems research		[2,000]	
			Novel energetic materials		[1,000]	
0400	0601103D&Z	3	UNIVERSITY RESEARCH INITIATIVES			
0400	0601105D&Z	4	FORCE HEALTH PROTECTION			
0400	0601108D&Z	5	HIGH ENERGY LASER RESEARCH INITIATIVES			
0400	0601111D&Z	6	GOVERNMENT/INDUSTRY COSPONSORSHIP OF UNIVERSITY RESEARCH		7,000	7,000
			Focus center research program		[7,000]	
0400	0601114D&Z	7	DEFENSE EXPERIMENTAL PROGRAM TO STIMULATE COMPETITIVE RESEAR	9,590		9,590
0400	0601384BP	8	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	36,769		36,769
0400	0602227D&Z	9	MEDICAL FREE ELECTRON LASER	9,668	8,000	17,668
			Medical free electron laser		[8,000]	
0400	0602228D&Z	10	HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (HBCU) SCIENCE	14,192		14,192
0400	0602234D&Z	11	LINCOLN LABORATORY RESEARCH PROGRAM	25,441		25,441
0400	0602301E	12	COMPUTING SYSTEMS AND COMMUNICATIONS TECHNOLOGY	342,614		342,614
0400	0602302E	13	EMBEDDED SOFTWARE AND PERSVASIVE COMPUTING			
0400	0602383E	14	BIOLOGICAL WARFARE DEFENSE	147,533	3,000	150,533
			Biodefense research		[3,000]	

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0602384BP	15	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	104,385	7,900	112,285
			Mustard gas antidote		[3,000]	
			Bioinformatics		[2,000]	
			Chemical agent persistence models		[2,900]	
0400	0602702E	16	TACTICAL TECHNOLOGY	339,175	-25,000	314,175
			SIER		[-4,000]	
			Automated battle management		[-10,000]	
			Novel sensors		[-3,000]	
			HEDlight		[-5,000]	
			Laser star		[-3,000]	
0400	0602712E	17	MATERIALS AND ELECTRONICS TECHNOLOGY	502,044	-23,000	479,044
			Bio-based nanosensors		[2,000]	
			Unjustified growth		[-25,000]	
0400	0602716BR	18	WMD DEFEAT TECHNOLOGY	249,786		249,786
0400	0602717BR	19	WMD DEFENSE TECHNOLOGIES	116,113		116,113
0400	0602787D8Z	20	MEDICAL TECHNOLOGY	10,084	100	10,184
			Pseudofolliculitis Barbae		[100]	
0400	0602890D8Z	21	HIGH ENERGY LASER RESEARCH			
0400	1160401BB	22	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	13,109		13,109
0400	1160407BB	23	SOF MEDICAL TECHNOLOGY DEVELOPMENT	2,162		2,162
0400	0603002D8Z	24	MEDICAL ADVANCED TECHNOLOGY	2,063		2,063
0400	0603104D8Z	25	EXPLOSIVES DEMILITARIZATION TECHNOLOGY			
0400	0603121D8Z	26	SO/LIC ADVANCED DEVELOPMENT	32,682		32,682

**Title II-RDT and E**  
(Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0400	0603122D8Z	27	COMBATING TERRORISM TECHNOLOGY SUPPORT	46,719	10,000	56,719
			Blast mitigation		[10,000]	
0400	0603160BR	28	COUNTERPROLIFERATION INITIATIVES - PROLIFERATION PREVENTION AN	74,456	5,000	79,456
			Portable radiation search tool		[5,000]	
0400	0603175C	29	BALLISTIC MISSILE DEFENSE TECHNOLOGY	204,320	7,300	211,620
			Massively parallel optical interconnects		[4,000]	
			Radiation hardened CMOS		[3,300]	
0400	0603225D8Z	30	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	23,319		23,319
0400	0603232D8Z	31	AUTOMATIC TARGET RECOGNITION			
0400	0603285E	32	ADVANCED AEROSPACE SYSTEMS	361,067	-40,000	321,067
			Unjustified growth		[-25,000]	
			Reduction - Orbital Express project		[-15,000]	
0400	0603384BP	33	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM - ADVANCED DEVELOPM	117,343	9,500	126,843
			Anthrax and plague oral vaccine development		[6,000]	
			Water quality sensors		[3,500]	
0400	0603400D8Z	34	JOINT UNMANNED COMBAT AIR SYSTEMS (J-UCAS) ADVANCED TECHNOLC	284,617		284,617
0400	0603704D8Z	35	SPECIAL TECHNICAL SUPPORT			
0400	0603711BR	36	ARMS CONTROL TECHNOLOGY			

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0603712S	37	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	27,542	19,500	47,042
			Ferrite technology		[2,500]	
			Support of legacy systems		[2,000]	
			Multi-purpose airframe support system		[2,500]	
			Vehicle fuel cell program		[7,000]	
			Supply chain surge/shortage		[2,500]	
			Microelectronics testing and technology		[3,000]	
0400	0603716D8Z	38	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	56,936		56,936
0400	0603727D8Z	39	JOINT WARFIGHTING PROGRAM	9,936		9,936
0400	0603739E	40	ADVANCED ELECTRONICS TECHNOLOGIES	218,151	-11,000	207,151
			Unjustified growth		[-11,000]	
0400	0603750D8Z	41	ADVANCED CONCEPT TECHNOLOGY DEMONSTRATIONS	213,901	2,000	215,901
			Hardware encryption device		[2,000]	
0400	0603755D8Z	42	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	186,666	4,000	190,666
			High performance computing visualization		[2,000]	
			Simulation center upgrade		[2,000]	
0400	0603760E	43	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	225,784	-11,000	214,784
			Unjustified growth		[-11,000]	
0400	0603762E	44	SENSOR AND GUIDANCE TECHNOLOGY	337,117	-15,000	322,117
			Unjustified growth		[-15,000]	
0400	0603763E	45	MARINE TECHNOLOGY			
0400	0603764E	46	LAND WARFARE TECHNOLOGY	63,121		63,121
0400	0603765E	47	CLASSIFIED DARPA PROGRAMS	238,131		238,131
0400	0603766E	48	NETWORK-CENTRIC WARFARE TECHNOLOGY	125,124		125,124

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0603769SE	49	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	13,756		13,756
0400	0603781D8Z	50	SOFTWARE ENGINEERING INSTITUTE	21,599		21,599
0400	0603805S	51	DUAL USE APPLICATION PROGRAMS			
0400	0603826D8Z	52	QUICK REACTION SPECIAL PROJECTS	64,389		64,389
0400	0603832D8Z	53	JOINT WARGAMING SIMULATION MANAGEMENT OFFICE	46,017		46,017
0400	0603924D8Z	54	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM			
0400	0603942D8Z	55	TECHNOLOGY LINK	1,934		1,934
0400	0605160D8Z	56	COUNTERPROLIFERATION SUPPORT	1,958	6,000	7,958
			Nuclear physical security		[6,000]	
0400	1160402BB	57	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT	48,803		48,803
0400	0603228D8Z	58	PHYSICAL SECURITY EQUIPMENT			
0400	0603709D8Z	59	JOINT ROBOTICS PROGRAM	11,771		11,771
0400	0603714D8Z	60	ADVANCED SENSOR APPLICATIONS PROGRAM	17,581		17,581
0400	0603736D8Z	61	CALS INITIATIVE			
0400	0603851D8Z	62	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	32,546	7,700	40,246
			Unexploded ordnance detection using airborne GPR		[4,700]	
			Enhanced techniques for the detection of explosives (ETDE)		[3,000]	
0400	0603869C	63	MEADS CONCEPTS			
0400	0603879C	64	ADVANCED CONCEPTS, EVALUATIONS AND SYSTEMS	256,159		256,159
0400	0603880C	65	BALLISTIC MISSILE DEFENSE SYSTEM SEGMENT			
0400	0603881C	66	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	937,748		937,748
			Arrow coproduction (non-additive)		[80,000]	

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0603882C	67	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT GMD enhancements GMD long lead	4,384,775	40,000 [75,000] [-35,000]	4,424,775
0400	0603883C	68	BALLISTIC MISSILE DEFENSE BOOST DEFENSE SEGMENT	492,614		492,614
0400	0603884BP	69	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	104,195		104,195
0400	0603884C	70	BALLISTIC MISSILE DEFENSE SENSORS Airborne infrared system	591,957	20,000 [15,000]	611,957
0400	0603886C	71	E-2C infrared search and track (IRST) BALLISTIC MISSILE DEFENSE SYSTEM INTERCEPTOR Kinetic energy interceptor	511,262	[5,000] -200,000 [-200,000]	311,262
0400	0603888C	72	BALLISTIC MISSILE DEFENSE TEST & TARGETS	713,658		713,658
0400	0603889C	73	BALLISTIC MISSILE DEFENSE PRODUCTS Joint National Integration Center	418,608	5,000 [5,000]	423,608
0400	0603890C	74	BALLISTIC MISSILE DEFENSE SYSTEMS CORE Corporate lethality program	479,764	-5,000 [-5,000]	474,764
0400	0603910D8Z	75	STRATEGIC CAPABILITY MODERNIZATION		25,000	25,000
0400	060xxxxD8Z	75A	Operationally responsive satellite payloads	13,747		13,747
0400	0603920D8Z	76	HUMANITARIAN DEMINING	5,886		5,886
0400	0603923D8Z	77	COALITION WARFARE	422,873		422,873
0400	0604400D8Z	78	JOINT UNMANNED COMBAT AIR SYSTEMS (J-UCAS) ADVANCED COMPONE			
0400	0604722D8Z	79	JOINT SERVICE EDUCATION AND TRAINING SYSTEMS DEVELOPMENT			
0400	0605017D8Z	80	REDUCTION OF TOTAL OWNERSHIP COST	27,351		27,351
0400	0303191D8Z	81	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	6,679		6,679



# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0400	0604384BP	82	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	152,379	7,000	159,379
			JBPDS		[5,000]	
			JSLSCAD		[2,000]	
0400	0604618D8Z	83	MANPADS DEFENSE PROGRAM			14,135
0400	0604709D8Z	84	JOINT ROBOTICS PROGRAM	14,135		13,845
0400	0604764K	85	ADVANCED IT SERVICES JOINT PROGRAM OFFICE (AITS-JPO)	13,845		18,183
0400	0604771D8Z	86	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	18,183		18,515
0400	0604861C	87	THEATER HIGH-ALTITUDE AREA DEFENSE SYSTEM - TMD	18,515		
0400	0604865C	88	PATRIOT PAC-3 THEATER MISSILE DEFENSE ACQUISITION			
0400	0605013BL	89	INFORMATION TECHNOLOGY DEVELOPMENT			10,683
0400	0605013D8Z	90	PROTOTYPE ACCOUNTING SYSTEMS	10,683		
0400	0605014SE	91	INFORMATION TECHNOLOGY DEVELOPMENT			52,407
0400	0605015BL	92	INFORMATION TECHNOLOGY DEVELOPMENT-STANDARD PROCUREMENT ;	52,407		6,690
0400	0605016D8Z	93	FINANCIAL MANAGEMENT SYSTEM IMPROVEMENTS	6,690		94,767
0400	0303129K	94	DEFENSE MESSAGE SYSTEM	94,767		6,623
0400	0303140K	95	INFORMATION SYSTEMS SECURITY PROGRAM	6,623		2,493
0400	0303141K	96	GLOBAL COMBAT SUPPORT SYSTEM	2,493		17,867
0400	0303158K	97	JOINT COMMAND AND CONTROL PROGRAM (JC2)	17,867		3,000
0400	0305840K	98	ELECTRONIC COMMERCE	3,000		3,466
0400	0305840S	99	ELECTRONIC COMMERCE	3,466		2,345
0400	0901200D8Z	100	BMMP DOMAIN MANAGEMENT AND SYSTEMS INTEGRATION	2,345		7,472
0400	0603704D8Z	101	SPECIAL TECHNICAL SUPPORT	7,472		19,274
0400	0603757D8Z	102	TRAINING TRANSFORMATION (T2)	19,274		
0400	0603835D8Z	103	TRANSFORMATION INITIATIVES PROGRAM			9,977

# **Title II-RDT and E** (Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	060385D8Z	104	UNEXPLODED ORDNANCE DETECTION AND CLEARANCE			
0400	0604774D8Z	105	DEFENSE READINESS REPORTING SYSTEM (DRRS)	19,691		19,691
0400	0604875D8Z	106	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	4,989		4,989
0400	0604943D8Z	107	THERMAL VICAR	7,263		7,263
0400	0605104D8Z	108	TECHNICAL STUDIES, SUPPORT AND ANALYSIS	30,618	-5,000	25,618
			Unjustified growth		[-5,000]	
0400	0605110BR	109	CRITICAL TECHNOLOGY SUPPORT	1,937		1,937
0400	0605114D8Z	110	BLACK LIGHT	21,535		21,535
0400	0605116D8Z	111	GENERAL SUPPORT TO C3I			
0400	0605117D8Z	112	FOREIGN MATERIAL ACQUISITION AND EXPLOITATION	35,572		35,572
0400	0605123D8Z	113	INTERAGENCY EXPORT LICENSE AUTOMATION	5,882		5,882
0400	0605124D8Z	114	DEFENSE TRAVEL SYSTEM	28,508		28,508
0400	0605126J	115	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	86,409		86,409
0400	0605128D8Z	116	CLASSIFIED PROGRAM USP(P)			
0400	0605130D8Z	117	FOREIGN COMPARATIVE TESTING	35,633		35,633
0400	0605170D8Z	118	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	11,490	2,200	13,690
			Command Information Superiority Architectures Program		[2,200]	
0400	0605200D8Z	119	GENERAL SUPPORT TO USD (INTELLIGENCE)			
0400	0605384BP	120	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	4,830		4,830
0400	0605502BR	121	SMALL BUSINESS INNOVATION RESEARCH	42,652		42,652
0400	0605502C	122	SMALL BUSINESS INNOVATIVE RESEARCH - MDA			
0400	0605502D8Z	123	SMALL BUSINESS INNOVATIVE RESEARCH			
0400	0605502E	124	SMALL BUSINESS INNOVATIVE RESEARCH			

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0400	0605710D8Z	125	CLASSIFIED PROGRAMS - C3I		10,000	10,000
			Foreign Supplier Assessment Center		[10,000]	
0400	0605790D8Z	126	SMALL BUSINESS INNOVATION RESEARCH/CHALLENGE ADMINISTRATION	1,999		1,999
0400	0605798S	127	DEFENSE TECHNOLOGY ANALYSIS	7,279	1,000	8,279
			Global research watch		[1,000]	
0400	0605799D8Z	128	FORCE TRANSFORMATION DIRECTORATE	19,591		19,591
0400	0605801K	129	DEFENSE TECHNICAL INFORMATION SERVICES (DTIC)	45,203		45,203
0400	0605803SE	130	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION	10,598		10,598
0400	0605804D8Z	131	DEVELOPMENT TEST AND EVALUATION	8,882		8,882
0400	0605898E	132	MANAGEMENT HQ - R&D	46,689		46,689
0400	0303169D8Z	133	INFORMATION TECHNOLOGY RAPID ACQUISITION	19,958		19,958
0400	0305193D8Z	134	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	12,878		12,878
0400	0305193G	135	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	[ ]		
0400	0901585C	136	PENTAGON RESERVATION	13,884		13,884
0400	0901598C	137	MANAGEMENT HQ - MDA	141,923		141,923
0400	0901598D8W	138	IT SOFTWARE DEV INITIATIVES	1,700		1,700
0400	0909999E	139	FINANCING FOR CANCELLED ACCOUNT ADJUSTMENTS			
0400	0604805D8Z	140	COMMERCIAL OPERATIONS AND SUPPORT SAVINGS INITIATIVE			
0400	0605127T	141	PARTNERSHIP FOR PEACE (PFP) INFORMATION MANAGEMENT SYSTEM	6,995		6,995
0400	0607384BP	142	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOP	2,178		2,178
0400	0208043J	143	CLASSIFIED PROGRAMS	1,663		1,663
0400	0208045K	144	C4I INTEROPERABILITY	41,074		41,074
0400	0208052J	145	JOINT ANALYTICAL MODEL IMPROVEMENT PROGRAM	5,577		5,577
0400	0300205R	146	INFORMATION TECHNOLOGY SYSTEMS			

## Title II-RDT and E

(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0301011G	147	CRYPTOLOGIC ACTIVITIES	[ ]		
0400	0301301L	148	GENERAL DEFENSE INTELLIGENCE PROGRAM	[ ]		
0400	0301318BB	149	HUMINT (CONTROLLED)	[ ]		
0400	0301398L	150	MANAGEMENT HEADQUARTERS GDIP, DIA	[ ]		
0400	0301555BB	151	CLASSIFIED PROGRAMS	[ ]		
0400	0301556BB	152	SPECIAL PROGRAM	[ ]		
0400	0302016K	153	NATIONAL MILITARY COMMAND SYSTEM-WIDE SUPPORT	1,240		1,240
0400	0302019K	154	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION	2,517		2,517
0400	0303126K	155	LONG-HAUL COMMUNICATIONS - DCS	11,401		11,401
0400	0303127K	156	SUPPORT OF THE NATIONAL COMMUNICATIONS SYSTEM			
0400	0303131K	157	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	7,261		7,261
0400	0303140D8Z	158	INFORMATION SYSTEMS SECURITY PROGRAM	11,135		11,135
0400	0303140G	159	INFORMATION SYSTEMS SECURITY PROGRAM	477,846		477,846
0400	0303149J	160	C4I FOR THE WARRIOR	4,177		4,177
0400	0303149K	161	C4I FOR THE WARRIOR			
0400	0303150K	162	GLOBAL COMMAND AND CONTROL SYSTEM	24,712		24,712
0400	0303153K	163	JOINT SPECTRUM CENTER	43,693		43,693
0400	0303165K	164	DEFENSE COLLABORATION TOOL SUITE (DCTS)	18,941		18,941
0400	0303170K	165	NET-CENTRIC ENTERPRISE SERVICES (NCES)	8,503		8,503
0400	0303610K	166	TELEPORT PROGRAM	52,059		52,059
0400	0304210BB	167	SPECIAL APPLICATIONS FOR CONTINGENCIES	10,272		10,272
0400	0304345BQ	168	NATIONAL IMAGERY AND MAPPING PROGRAM	20,758		20,758
0400	0305102BQ	169	DEFENSE IMAGERY AND MAPPING PROGRAM	[ ]		
0400	0305125D8Z	170	CRITICAL INFRASTRUCTURE PROTECTION (CIP)	[ ]		
				28,021		28,021

# **Title II-RDT and E** (Dollars in Thousands)

<u>Acct</u>	<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0400	0305127BZ	171	FOREIGN COUNTERINTELLIGENCE ACTIVITIES	[ ]		
0400	0305127V	172	FOREIGN COUNTERINTELLIGENCE ACTIVITIES			
0400	0305146BZ	173	DEFENSE JOINT COUNTERINTELLIGENCE PROGRAM (JMIP)	32,939		32,939
0400	0305146D8Z	174	DEFENSE JOINT COUNTERINTELLIGENCE PROGRAM (JMIP)			
0400	0305183L	175	DEFENSE HUMINT PROGRAM (DHIP)	[ ]		
0400	0305190D8Z	176	C3I INTELLIGENCE PROGRAMS			
0400	0305191D8Z	177	TECHNOLOGY DEVELOPMENT			
0400	0305193G	178	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	[ ]		
0400	0305193L	179	INTELLIGENCE SUPPORT TO INFORMATION OPERATIONS (IO)	[ ]		
0400	0305199D8Z	180	NET CENTRICITY	214,222		214,222
0400	0305202G	181	DRAGON U-2 (JMIP)	[ ]		
0400	0305206G	182	AIRBORNE RECONNAISSANCE SYSTEMS	[ ]		
0400	0305207G	183	MANNED RECONNAISSANCE SYSTEMS	[ ]		
0400	0305208BQ	184	DISTRIBUTED COMMON GROUND SYSTEMS	[ ]		
0400	0305208G	185	DISTRIBUTED COMMON GROUND SYSTEMS	[ ]		
0400	0305208L	186	DISTRIBUTED COMMON GROUND SYSTEMS	[ ]		
0400	0305883L	187	HARD AND DEEPLY BURIED TARGET INTEL SUPPORT	[ ]	10,000	10,000
			Enhanced ISR		[10,000]	
0400	0305884L	188	INTELLIGENCE PLANNING AND REVIEW ACTIVITIES	[ ]		
0400	0305885G	189	TACTICAL CRYPTOLOGIC ACTIVITIES	[ ]		
0400	0305889G	190	COUNTERDRUG INTELLIGENCE SUPPORT	[ ]		
0400	0305917D8Z	191	NATIONAL SECURITY SPACE ARCHITECT (NSSA)			
0400	0708011S	192	INDUSTRIAL PREPAREDNESS	11,005	3,000	14,005
			Advanced manufacturing technologies		[3,000]	

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
0400	0708012S	193	LOGISTICS SUPPORT ACTIVITIES	11,389		11,389
0400	0902298J	194	MANAGEMENT HEADQUARTERS (JCS)	22,421		22,421
0400	1001018D&Z	195	NATO JOINT STARS	30,399		30,399
0400	1160279BB	196	SMALL BUSINESS INNOVATIVE RESEARCH/SMALL BUS TECH TRANS PILOT			
0400	1160401BB	197	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT			
0400	1160402BB	198	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT			
0400	1160404BB	199	SPECIAL OPERATIONS TACTICAL SYSTEMS DEVELOPMENT	311,966	4,900	316,866
			LAW confined space		[4,900]	
0400	1160405BB	200	SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT	25,015	5,000	30,015
			Wireless management and control project		[5,000]	
0400	1160407BB	201	SOF MEDICAL TECHNOLOGY DEVELOPMENT			
0400	1160408BB	202	SOF OPERATIONAL ENHANCEMENTS	57,643	4,000	61,643
			Tactical computer system development		[4,000]	
0400	XXXXXXXXXX 999		CLASSIFIED PROGRAMS	3,578,082		3,578,082
			Financial information systems		-10,500	-10,500
			<b>Total, RDT&amp;E Defense-Wide</b>	<b>20,739,837</b>	<b>-103,900</b>	<b>20,635,937</b>

**Title II-RDT and E**  
(Dollars in Thousands)

Acct	Account	Line	Program Title	FY2005 Request	Senate Change	Senate Authorized
			<b>OPERATIONAL TEST &amp; EVALUATION, DEFENSE</b>			
0460	0603941D8Z	1	TEST & EVALUATION SCIENCE & TECHNOLOGY	16,295		16,295
0460	0604940D8Z	2	CENTRAL TEST AND EVALUATION INVESTMENT DEV (CTEP)	123,562	3,000	126,562
			Autonomous unmanned surface vessel		[3,000]	
0460	0605118D8Z	3	OPERATIONAL TEST AND EVALUATION	42,390		42,390
0460	0605131D8Z	4	LIVE FIRE TESTING	10,209	1,000	11,209
			Joint Test and Training Rapid Advanced Capabilities		[1,000]	
0460	0605804D8Z	5	DEVELOPMENT TEST AND EVALUATION	112,679		112,679
			<b>Total, Operational Test &amp; Evaluation, Defense</b>	<b>305,135</b>	<b>4,000</b>	<b>309,135</b>
			<b>TOTAL RDT&amp;E</b>	<b>67,772,288</b>	<b>803,400</b>	<b>68,575,688</b>

### **DARPA fundamental research**

The budget request included \$143.7 million in PE 61101E for defense research sciences at the Defense Advanced Research Projects Agency (DARPA). The committee notes that DARPA's commitment to investing in fundamental research should remain strong so that the Department of Defense can continue to develop revolutionary new technologies and avoid technological surprise from potential adversaries. DARPA's basic research programs must also be structured and managed in a manner consistent with the nature of fundamental research and with the style of research typically performed at universities.

The committee recommends an increase in PE 61101E of \$7.5 million to push fundamental research in selected disciplines forward for use by applied programs. Of this amount, the committee recommends an increase of \$2.5 million for research on molecular electronics; \$2.0 million for nanophotonic systems research, \$2.0 million for research on the treatment of infectious organisms; and \$1.0 million to continue basic research on novel energetic materials for possible military applications.

Basic biological science programs conducted under this account, for example, the Human Assisted Neural Devices (HAND) program, have the potential to significantly improve human health and battlefield effectiveness. Research offers promising solutions for military personnel, veterans, and others seeking treatment for neurological problems caused by trauma and disease. Potential applications in the intricate operation of unmanned devices and equipment would provide for enhanced stand off, robotic capabilities, removing uniformed personnel from danger. The committee supports this, and other efforts, under this basic research account and commends the Department for pursuit of these innovative projects.

### **Government/industry co-sponsorship of research**

The budget request included no funding for government/industry cosponsorship of research. The committee recommends an increase of \$7.0 million in PE 61111D8Z for continuation of this partnership, which has a history of advancing the capabilities of weapons systems, radars, missile seekers and information, and communications networks. The program also supports university-based microelectronics research centers that assist in producing technology and in training the next generation of electronics engineers.

### **Medical free electron laser**

The budget request included \$9.7 million in PE 62227D8Z for the medical free electron laser (MFEL). The MFEL meets multiple military needs, and has an established track record of productivity through advances in materials science and battlefield medicine. Continued progress in burn therapies; treatment of head trauma; and treatment of vascular, ocular and peripheral nerve, and orthopedic injuries are all essential to the health of the warfighter. The committee recommends an increase in PE 62227D8Z of \$8.0 million for the medical free electron laser program.



**Biodefense research**

The budget request included \$147.5 million in PE 62383E, for biological warfare defense. Discovery of underlying marker and identification techniques associated with pathogen detection and remediation remains important in the Department of Defense's overall efforts to counter chemical and biological threats. The committee recommends an increase in PE 62383E of \$3.0 million for biological research aimed at development of novel prophylactic and therapeutic approaches, which would increase survival rates during a chemical or biological attack; treat the largest number of people; and treat people who, prior to the introduction of new detection and remediation capabilities, would have died.

**Bioinformatics**

The budget request included \$104.4 million in PE 62384BP for chemical and biological defense program applied research, including efforts to improve chemical and biological defense equipment and material. The committee continues to support Defense Department research in the field of bioinformatics. Molecular-level biological data such as pathogen DNA is essential to combat bioweapons and infectious diseases. The committee understands that the requirement to process extremely large life science data sets, and conduct bio-system and genomic information analysis of pathogens to end-users in the military presents significant challenges. Therefore, the committee recommends an increase of \$2.0 million in PE 62384BP for bioinformatics research.

**Mustard gas antidote**

The budget request included \$11.2 million in PE 62384BP for applied research related to the development and application of pharmaceuticals for the prevention and treatment of the toxic effects of nerve, blister, respiratory, and blood agents. The committee recommends an increase of \$3.0 million in PE 62384BP for mustard gas antidote research. The committee is aware of research being conducted by the Department of Defense for a mustard gas antidote using signal transduction inhibition antioxidant liposomes (STIMAL), and notes that STIMAL research has demonstrated the ability to substantially reduce or eliminate the affects of a range of chemical and biological weapons.

**Verification and validation of chemical agent persistence models**

The budget request included \$104.4 million in PE 62384BP, for chemical and biological defense applied research, including \$27.4 million for supporting science and technology. The committee recommends an increase of \$2.9 million to PE 62384BP, for verification and validation of chemical agent persistence models to help protect U.S. forces and permit them to operate effectively in a chemically contaminated environment.

**Tactical technologies**

The budget request included \$339.2 million in PE 62702E for applied research on tactical systems. The committee recommends a total reduction of \$25.0 million from this account. The committee

recommends a reduction of \$4.0 million from the Stimulated Isomer Energy Release program. The committee agrees with the majority of expert technical opinions that this effort, though carrying a large potential payoff, should be a smaller fundamental research effort at this time. The committee recommends a reduction of \$10.0 million for the Automated Battle Management program. It is not clear how this effort is coordinated with ongoing service efforts for network centric warfare or how it is connected to the Department of Defense's Horizontal Fusion program. The committee recommends a reduction of \$3.0 million for novel sensors designed for human-animal discrimination systems to maintain a reasonable funding path. The committee recommends a reduction of \$5.0 million for the HEDLight program. The committee believes that lighting technology is not the highest priority area of Navy interest, and that the transition success of this effort is questionable. The committee recommends a reduction of \$3.0 million for the Laser Star program. The committee believes that a reduced program effort should be maintained until a clear technology transition path for the program is developed.

#### **Biological sensor research**

The budget request included \$502.0 million in PE 62712E for materials and electronics technology. The committee recommends an increase in PE 62712E of \$2.0 million to develop new devices based on nanotechnology for use in defense applications in biological sensing and decontamination.

#### **Materials and electronics applied research**

The budget request included \$502.0 million in PE 62712E for applied research in materials and electronics technologies. The committee recommends a reduction in PE 62712E of \$25.0 million due to unjustified program growth.

#### **General medical research**

The budget request included \$10.1 million in PE 62787D8Z for medical technology. The committee recommends an increase in PE 62787D8Z of \$100,000 for clinical trials and research on a topical treatment for pseudofolliculitis barbae (PFB). The topical treatment under development would quickly yield results, providing relief for those who suffer from the PFB skin condition and accelerating their deployment times.

#### **Blast mitigation program**

The budget request included \$47.7 million in PE 63122D8Z for Combating Terrorism Technical Support. The committee recommends an increase of \$10.0 million in PE 63122D8Z for the blast mitigation program to pursue research and development of technologies to validate and enhance existing and new analytical tools for use by the armed services and homeland defense officials. The committee recognizes the importance of understanding the response of buildings, structures, and housing to explosives and other weapons of mass destruction to improve the protection of our assets.

### **Portable radiation search tool**

The budget request included \$74.5 million in PE 63160BR for counterproliferation initiatives-proliferation prevention and defeat efforts, including efforts to demonstrate integrated nuclear warfare protection systems technologies. The committee notes that the Defense Threat Reduction Agency included testing of a portable radiation search tool (PRST) in the congressionally-directed Unconventional Nuclear Warfare Defense pilot program. The PRST, a gamma ray and neutron detector based on fiber optic technology, demonstrated the capability to detect radiological weapons of mass destruction. Therefore, the committee recommends an increase of \$5.0 million in PE 63160BR for continued development of the PRST.

### **Massively parallel optical interconnects**

The budget request included \$204.3 million in PE 63175C for ballistic missile technology, of which \$3.3 million is for microsatellite sensing technology development.

The committee is aware of ongoing Missile Defense Agency research on missile defense applications for microsatellites, and notes that microsatellites will require substantial onboard processing and high signal processing rates to detect and track threat missiles. Continuing research and development on massively parallel electrophotical interconnects is intended to enable very high data exchange rates between microsatellite chip sets. The committee understands that additional funds are required to complete this effort.

Therefore, the committee recommends an increase of \$4.0 million in PE 63175C for additional development of massively parallel optical interconnects.

### **Radiation hardened electronics**

The budget request included \$204.3 million in PE 63175C for ballistic missile technology, but no funding for research and development for radiation hardened complementary metal oxide semiconductors.

The committee understands that strained silicon electronics have demonstrated higher speeds with lower power consumption, and improved gamma ray and x-ray tolerances compared to current silicon chips. The committee notes that high-speed radiation hardened electronics will be valuable in many applications, and that the Missile Defense Agency has sponsored innovative research for this technology in the past. Additional funds are needed to optimize manufacturing processes and improve performance.

The committee recommends an increase of \$3.3 million in PE 63175C for radiation hardened complementary metal oxide semiconductors.

### **Aerospace systems research**

The budget request included \$361.1 million in PE 63285E for advanced technology development for aerospace systems. The committee recommends a decrease in PE 63285E of \$40.0 million due to excessive program growth. Of this amount, the committee recommends a specific reduction of \$15.0 million in the Orbital Express project and urges the Department of Defense to examine the

military utility, goals, accomplishments, and technology transition plans for this program.

#### **Anthrax and plague oral vaccine research and development**

The budget request included \$21.7 million in PE 63384BP for preclinical development of safe and effective prophylaxes and therapies for pre-and post-exposure to biological threat agents, including development of oral vaccines. The committee supports efforts to exploit advanced vaccine technology to develop a single-dose oral vaccine that can protect against multiple biological warfare agents, such as anthrax and plague. Therefore, the committee recommends an increase of \$6.0 million in PE 63384BP for the development of an oral vaccine.

#### **Water quality sensors**

The budget request included no funding in PE 63384BP for water quality sensors. The committee recommends an increase of \$3.5 million in PE 63384BP for the development of a hand held water quality sensing device capable of detecting the presence of chemical, biological, and pollutant agents in drinking water.

#### **Generic logistics research and development technology demonstrations**

The budget request included \$27.5 million in PE 63712S for generic logistics research and development technology demonstrations. Targeted increases for specific projects would accelerate transition and reduce costs for selected department maintenance operations. The committee recommends an increase in PE 63712S of \$19.5 million: \$3.0 million for microelectronics testing and technologies; \$7.0 million to identify and support technological advances to develop fuel cell technology for use in Department of Defense vehicles; \$2.0 million to address diminishing manufacturing source problems, resulting from legacy systems that remain in use but are no longer in production; \$2.5 million for ferrite technology, which provides capabilities for modern radar, communications and electronic countermeasure systems; \$2.5 million to address supply chain variations; and \$2.5 million for a multipurpose airframe support system, which will service legacy vehicles and new aircraft.

#### **Advanced electronics technologies**

The budget request included \$218.2 million in PE 63739E for the development of advanced electronics technologies. The committee recommends a reduction in PE 63739E of \$11.0 million due to excessive program growth in the area of mixed technology integration.

#### **Hardware encryption devices**

The budget request included \$214.0 million in PE 63750D8Z for the Advanced Concept Technology Demonstrations program. To improve operational security in the event of lost or overrun computer assets, the committee recommends an increase in PE 63750D8Z of \$2.0 million for acceleration of hardware encryption devices.

### **High performance computing**

The budget request included \$186.7 million in PE 63755D8Z for the high performance computing modernization program, which supports the needs of the warfighter for technological superiority and military dominance on the battlefield by providing advanced computational services to U.S. weapons systems, scientists, and engineers. The committee recommends an increase in PE 63755D8Z of \$2.0 million for high performance computing visualization research, which provides synergies between existing organizations and programs that are vital to the advancement of the Department of Defense's mission. The areas addressed in this research—weather forecasting, computational chemistry and nanosensors for bioagent detection, robust distributed data storage, and advanced visualization methods—are essential to the execution of the warfighting mission.

The acquisition community is increasingly reliant on high fidelity simulations to complement live fire testing activities. Simulations also permit engineering evaluation of functions that are not physically tested due to range, environmental, or cost constraints. The committee recommends an increase of \$2.0 million for high performance computing simulation upgrades.

### **Command and control systems**

The budget request included \$225.8 million in PE 63760E for DARPA command, control, and communications systems research. The committee recommends a decrease in PE 63760E of \$11.0 million due to excessive program growth.

### **Sensors and guidance technologies**

The budget request included \$337.1 million in PE 63762E for Defense Advanced Research Projects Agency sensor and guidance technology research programs. The committee recommends a decrease in PE 63762E of \$15.0 million due to significant program growth over the last three years.

### **Nuclear physical security**

The budget request included \$2.0 million in PE 65160D8Z for the nuclear matters program, but no funding for research and development related to nuclear physical security.

The committee notes that in the current national security environment, nuclear weapons face an increased threat of terrorist attack. Although the military services have taken steps to address this threat, the committee does not believe that the research and development to improve the protective infrastructure has kept pace with changing threats. The committee believes that a reinvigorated nuclear physical security research and development program should be established that focuses on new technologies that reinforce the concept of assured denial.

The committee recommends an increase of \$6.0 million in PE 65160D8Z for nuclear physical security research and development.

### **Enhanced techniques for the detection of explosives**

The budget request included \$32.5 million in PE 63851D8Z for enhanced techniques for the detection of explosives for the Environ-

mental Security Technical Certification Program. The committee recommends an increase of \$3.0 million in PE 63851D8Z to continue the Crane Naval Surface Warfare Center project, to improve technologies presently deployed for explosive detection and to deliver faster, more cost-effective, and more reliable detection systems. The committee notes that even the newest equipment suffers from high false alarm rates on all types of explosives, improvised explosive devices, land mines, and unexploded ordnance in different environments. This project addresses a compelling need for developing standoff detection systems employing multiple detectors of different types with the goal of attaining a good detection rate with low false signals.

#### **Unexploded ordnance detection using airborne ground penetrating radar (GPR)**

The budget request included \$32.5 million in PE 63851D8Z for advanced technology development of the Environmental Security Technical Certification Program. The committee recommends an increase of \$4.7 million in PE 63851D8Z for unexploded ordnance detection using airborne ground penetrating radar (GPR). The committee notes that this ongoing program will support the enhancement of GPR by developing the necessary technology to detect unexploded ordnance through foliage.

#### **Arrow ballistic missile defense system**

The budget request included \$87.4 million in PE 63881C for the Arrow ballistic missile defense system, of which \$24.5 million is for the Arrow missile production program.

The committee recognizes the importance of the Arrow system to the defense of U.S. allies and interests in the Middle East, and coproduction of the Arrow missile by Israeli and U.S. industry partners to enhance Arrow production rates. Of the funds authorized for ballistic missile defense, the committee authorizes up to \$80.0 million for coproduction of the Arrow ballistic missile defense system.

#### **Ground-based midcourse ballistic missile defense**

The budget request included \$4.4 billion in PE 63882C for the ballistic missile defense (BMD) midcourse defense segment, of which \$3.2 billion is for the ground-based midcourse defense (GMD) element.

Consistent with the requirements of the National Missile Defense Act of 1999 (Public Law 106-38), the committee continues to support fielding of the GMD element as part of the missile defense test bed. The committee notes that the use of the operational capabilities of missile defense test bed has been endorsed in testimony before the committee by both the Commander of U.S. Strategic Command, representing the operational community, and the Director of Operational Test and Evaluation, who oversees Missile Defense Agency testing.

The committee is concerned, however, that the capability to conduct tests of the GMD element concurrently with GMD operations is not yet robust. The committee recognizes that effective concurrent test and operation will depend on several factors: development

of a good concept of operations; extensive coordination between the system developer, the developer of the system concept of operations, and the system operator; sufficient redundancy in activated assets to avoid extended periods during which either test or operation would be unduly inhibited; interoperability of test assets with activated assets; and sufficient personnel to support concurrent test and operation. The committee understands that GMD element capabilities will improve over time as GMD components mature, but is concerned that in the near-term, some technical aspects of the GMD element may lack the redundancy to support concurrent test and operation as effectively as would be desired.

The committee also believes that effective test and operation of the GMD system will require sufficient funds to sustain the test bed, including acquisition of spare parts and logistics support. The committee understands that additional sustainment funds are needed to provide higher assurance that test and operational requirements can be met.

The committee recommends an increase of \$75.0 million for the GMD element for: (1) software upgrades; additional system components; development of procedures, protocols, and concepts of operations; and testing to improve concurrent test and operations capabilities of the GMD; (2) additional spare parts and logistics support to improve GMD sustainability; and (3) additional risk reduction and testing.

The committee notes that \$493.3 million of the GMD budget request is to acquire 10 additional interceptors, kill vehicles, and silos in fiscal year 2005 and \$35.0 million for long lead items for another 10 missiles to be acquired in fiscal year 2006 potentially to be fielded at a third GMD site. The committee recognizes that the operational capabilities of the missile defense test bed are enhanced by additional interceptors. The committee also understands that these interceptors will provide valuable test data, either through life cycle and ground testing or launch during the test program. The committee notes, however, that no third GMD site has been identified. The committee believes that acquisition of long lead items for additional missiles is premature and that this funding is more appropriately realigned to support concurrent test and operations and GMD sustainment. The committee recommends no funding for long lead items for additional GMD interceptor missiles.

Overall, the committee recommends \$3.2 billion in PE 63882C for the ground-based midcourse defense element, an increase of \$40.0 million.

#### **Airborne infrared system**

The budget request included \$592.0 million in PE 63884C for ballistic missile defense sensors, but no funding for the airborne infrared system (AIRS).

AIRS is a system of infrared and visible sensors, a surveillance radar, and adjunct data processing and storage that can track ballistic missiles and their warheads in all phases of flight. Early versions of the system are mounted on aircraft (the High Altitude Observatory or HALO and HALO II), but with incremental and evolutionary development, could be deployed on a variety of plat-

forms, including the Global Hawk unmanned aerial vehicle and potentially, the High Altitude Airship being developed by the Missile Defense Agency (MDA). HALO and HALO II have already provided valuable data on infrared signatures of ballistic missiles. The committee believes that an improved system, if and when deployed, could provide important test, operational, and technical intelligence capabilities in support of ballistic missile defense.

Therefore, the committee recommends an increase of \$15.0 million in PE 63884C for AIRS research and development. This increase will allow MDA to proceed with engineering development for system connectivity, a closed loop fire control system, and an AIRS prototype system for manned or unmanned air vehicles.

#### **E-2 infrared search and track**

The budget request included \$592.0 million in PE 63884C for ballistic missile defense sensors, but no funding for infrared search and track technology for the Navy's E-2 tactical warning and command and control aircraft.

The Navy has conducted testing of a turreted infrared search and track (IRST) system on the Navy's E-2's tactical warning and command and control aircraft that successfully demonstrated the potential for such a system to receive cues, and then detect and track short and medium range ballistic missiles. A more capable system, that includes fixed infrared arrays and a turret, shows high potential for a robust capability to detect and track these missile threats early in flight through midcourse trajectory and to provide accurate impact point prediction.

Therefore, the committee recommends an increase of \$5.0 million in PE 63884C for flight testing and continued development of the E-2 IRST project.

#### **Kinetic energy interceptor**

The budget request included \$511.3 million in PE 63886C for ballistic missile defense system (BMDS) kinetic energy interceptors (KEI). The committee notes that this request represents an increase of about 350 percent compared to fiscal year 2004 appropriations.

The BMDS interceptor development program seeks to develop by 2010 a ground-based BMD system to intercept threat missiles in their boost phase, shortly after takeoff. To achieve this schedule, the program will combine relatively mature component technologies with an advanced interceptor missile. The ground-based system will then serve as the basis for a sea-based follow-on system.

The committee notes that the concept of operations for a kinetic energy boost phase system requires that the interceptors be deployed relatively close to the launch sites. Consequently, against some potential adversaries, ground-based boost phase intercept is not a viable alternative. To defend against threats from other potential adversaries, multiple ground-based KEI sites would be required. The committee believes that a concept of operations based on permanent KEI deployment in multiple sites contiguous with a potential adversary or multiple emergency deployments in volatile regions is at best problematic.



The committee recognizes that an advanced KEI interceptor could be used to upgrade the current ground-based midcourse defense element. The committee further believes that a sea-based BMD system that provides boost, midcourse, and terminal defense could be valuable to defend both the United States and its allies and friends in a variety of contingencies.

The committee recommends a decrease of \$200.0 million in PE 63886C for KEI. The committee notes that the recommended funding represents an increase compared to the fiscal year 2004 funding level of about 175 percent, sufficient to pursue an aggressive program. The committee recommends that the funds available be used to continue interceptor development, sea-basing, and sea-based concepts of operations.

The committee notes that the Missile Defense Agency intends to conduct a test of the near field infrared experiment (NFIRE) that will likely result in a collision between the target missile and the NFIRE spaceborne sensor. The committee is concerned that effects of the space debris from such an impact are not well enough understood. The committee directs that this test, if it proceeds as planned, be conducted in such a manner as to prevent an impact. The committee directs the Director of the Missile Defense Agency to provide the congressional defense committees a report no later than March 15, 2005, on the risks to space assets posed by debris that would result from an impact between the NFIRE sensor and a target missile. The committee urges the Missile Defense Agency to explore cost-effective alternatives for collecting near-field data on missile plumes.

#### **Joint national integration center**

The budget request included \$418.6 million in PE 63889C for ballistic missile defense products.

The committee recognizes the growing threat posed by ballistic missiles to U.S. allies and friends overseas, and supports efforts by the Department of Defense to more fully engage international partners in the effort to develop and deploy effective ballistic missile defenses. The committee believes that involvement of allies and friends in exercises and modeling and simulation can play a useful role in encouraging international participation in these development efforts. The Joint National Integration Center (JNIC) is the Missile Defense Agency's primary modeling and simulation center. JNIC's integrated system test capability will be important to assuring that ballistic missile defense (BMD) systems are effective against a full range of threats to the United States, deployed U.S. forces, and U.S. allies and friends.

The committee recommends an increase of \$5.0 million in PE 63889C for JNIC support of international missile defense events and activities. The committee expects that this increase will enhance exploration of the full range of policy, operational and technical considerations related to international BMD cooperation.

#### **Ballistic missile defense lethality testing**

The budget request included a total of \$479.8 million in PE 63890C for ballistic missile defense (BMD) system core activities, which provides resources to define and integrate the BMD system.

Of this amount, \$19.2 million was requested for lethality testing and analysis, an increase of \$4.0 million compared to fiscal year 2004 funding and approximately triple the amount authorized for this purpose in fiscal year 2003. The committee believes that these increases are excessive, and recommends a decrease of \$5.0 million in PE 63890C for the corporate lethality program.

#### **Joint Biological Point Detection System**

The budget request included \$8.6 million in PE 64384BP for the Joint Biological Point Detection System (JBPDS), a modular biological detection suite integrated onto service platforms. The committee recommends an increase of \$5.0 million to provide continued product improvement and enhancement of the capabilities of JBPDS. The JBPDS is the first joint service product that provides continuous, rapid fully-automated detection, collection, identification, warning, and sample isolation of Biological Warfare Agents (BWA).

#### **Joint Service Lightweight Standoff Chemical Agent Detector**

The budget request included \$20.0 million in PE 64384BP for the Joint Service Lightweight Standoff Chemical Agent Detector (JSLSCAD), which detects chemical agents at distances up to five kilometers in stand-alone variants. The JSLSCAD also provides real-time detection of chemical agents in moving vehicle-mounted variants. The committee recommends an increase of \$2.0 million to support additional modeling and simulation efforts to increase capability in the fielded increment 1 systems.

#### **Technical studies support and analysis**

The budget request included \$30.6 million in PE 65104D8Z for technical studies support and analysis. The committee recommends a decrease in PE 65104D8Z of \$5.0 million and encourages programs which require studies to provide funding for conducting examinations of selected projects and initiatives.

#### **Command Information Superiority Architectures Program**

The budget request included \$5.2 million in PE 65170D8Z for the Command Information Superiority Architectures (CISA) Program. This program focuses on developing net-centric transition plans and architectures for the combatant commands. The amount provided in the budget request will provide for architecture models at two of the combatant commands (Joint Forces Command and United States Strategic Command) that will be used to guide the net-centric transition in future fiscal years. The research, development, test, and evaluation funds will be used to finalize the development of the Net-centric Operations and Warfare Reference Model that will be used throughout the Department of Defense in the development of systems and capabilities that support Net-centric Warfare and Operations. Additional funds are needed to expand this architecture program to the other combatant commands. The committee recommends an increase of \$2.2 million in PE 65170D8Z for CISA to accelerate this program.

### **Foreign supplier assessment center**

The budget request included \$35.6 million in Research, Development, Test and Evaluation, Defense-wide, for foreign comparative testing, but did not include funding for the Foreign Supplier Assessment Center (FSAC) concept which was initiated in 2004, after the submission of the fiscal year 2005 budget request.

The FSAC concept was established to assess potential foreign suppliers wanting to provide products and services, including components for weapon systems, automation hardware, and various forms of software to the Department of Defense. The FSAC will fulfill a critical need to identify and categorize potential foreign suppliers; conduct tests and evaluation of products and services for appropriate security purposes; and develop recommendations and risk mitigation plans.

The committee recommends an increase of \$10.0 million in PE 65710D8Z, for the continued development and sustainment of the FSAC concept.

### **Global Research Watch**

The budget request included \$7.3 million in PE 65798S for Defense Technology Analysis. The committee recommends an increase in PE 65798S of \$1.0 million to support the activities of the Global Research Watch program established in Section 231 of the National Defense Authorization Act for Fiscal Year 2004. The committee believes that better information on international research capabilities will be invaluable as the Department of Defense develops its own research portfolio. Knowledge of coalition partner's and potential adversary's scientific capabilities will inform efforts to establish effective defense technology partnerships, as well as to anticipate the emerging technological threats of the future.

### **Intelligence support for hard and deeply buried targets**

The committee recognizes that HDBTs are increasingly used by U.S. adversaries to conceal and protect valued military assets, such as command and control facilities, missiles, and weapons of mass destruction facilities. The committee understands that intelligence, surveillance, and reconnaissance (ISR) will play a key role in detecting and characterizing HDBTs and in identifying their vulnerabilities. The committee believes that additional focus on information-sharing and persistent and intrusive multi-sensor ISR is needed to support efforts to defeat HDBTs.

The committee recommends an increase of \$10.0 million in PE 35883L for intelligence support for hard and deeply buried targets.

### **Advanced manufacturing technologies**

The budget request included \$11.0 million in PE 78011S for industrial preparedness. The committee recommends an increase in PE 78011S of \$3.0 million for advanced manufacturing technologies focused on sensor development, energy products, materials, and steel and pharmaceutical processing.

### **Lightweight anti-armor weapon-confined space**

The budget request included \$312.0 million in Research, Development, Test and Evaluation, Defense-wide, for Special Operations

Forces (SOF), Tactical Systems Development, but did not include funding to complete development of the lightweight anti-armor weapon-confined space (LAW-CS).

The LAW-CS is a recoilless anti-armor and breaching weapon designed to be used in urban areas and confined spaces without causing harm to the operator. The current M72A7 LAW system has several safety issues that will be corrected by the LAW-CS. Additional research and development funding will complete the integration, testing, and certification of the LAW-CS, and enable production and fielding of the LAW-CS to special operations forces. Completion of the development of the LAW-CS is one of the highest priorities of the Commander, U.S. Special Operations Command, for additional funding.

The committee recommends an increase of \$4.9 million in PE 116404BB, to complete development of the LAW-CS system.

#### **Special operations wireless management and control project**

The budget request included \$25.0 million in Research, Development, Test and Evaluation, Defense-wide, for Special Operations Intelligence Systems Development, but included no funding to develop new capabilities for the Joint Threat Warning System (JTWS) as threats evolve.

The special operations wireless management and control project will develop capabilities that can be integrated into the JTWS that will provide special operations forces with tactical capabilities to maintain situational awareness of the wireless communications environment being used by potential adversaries.

The committee recommends an increase of \$5.0 million in PE 116405BB, to begin development of a wireless management and control capability for the JTWS.

#### **Tactical computer system development**

The budget request included \$57.6 million in Research, Development, Test and Evaluation, Defense-wide, for Special Operations Forces (SOF), Operational Enhancements, but did not include funding to develop additional capabilities to be integrated into existing personal tactical computer systems.

Small, ruggedized personal data assistants have been developed and are being fielded to SOF. Additional capabilities for integration onto these devices can be developed, such as range finders, air and maritime navigation, and small video cameras, that will further enhance the functionality and value of these systems to SOF operators.

The committee recommends an increase of \$4.0 million in PE 116408BB, to develop additional capabilities for integration into SOF personal tactical computer systems.

#### **Autonomous unmanned surface vessel**

The budget request included \$123.6 million in PE 64940D8Z for central test and evaluation investment development activities. The committee recommends an increase in PE 64940D8Z of \$3.0 million for testing of the autonomous unmanned surface vessel under development for use as a cost-effective, high endurance, intelligence, surveillance, and reconnaissance system.

### **Joint test and training rapid advanced capabilities**

The budget request included \$10.2 million in PE 65131D8Z for live fire testing. The committee recommends an increase in PE 65131D8Z of \$1.0 million for joint test and training rapid advanced technology. Increased efforts in test and training capabilities improve readiness, reduce casualties, and enhance mission success in combat situations.

### **Items of Special Interest**

#### **Defense Advanced Research Projects Agency Strategic Plan Review**

The National Defense Authorization Act for Fiscal Year 2004 contained a provision (section 232) that requires the preparation of a biennial strategic plan for the activities of the Defense Advanced Research Projects Agency (DARPA). The Act also directed the Secretary of Defense to establish an appropriate means for review and approval of the DARPA strategic plan. The first biennial strategic plan required by the Act is due with the fiscal year 2006 budget request in February 2005.

As DARPA works to develop the strategic plan, the committee urges the Secretary of Defense to institute a review process, consisting of internal and external advisors for approval of the plan. A group of Department of Defense technical experts, procurement executives, senior military officers, and representatives from the Department's intelligence community, led by the Director, Defense Research and Engineering and working in concert with highly regarded non-Department scientific leaders and private sector managers of large research and scientific enterprises, would add great value to DARPA's planning process and ensure program value and accelerated technology transition.

The strategic plan review should provide DARPA and Department leadership with critical advice to assist in the pursuit of DARPA's important and unique mission. The review group should also provide a fundamental service in identifying changes and policy challenges presented by rapid technological innovation. The review panel could use the opportunity presented by development of the strategic plan to foster close coordination between DARPA and the services, to ensure transition of technologies that meet requirements, to provide consistency of vision and budgeting as program managers serve their terms, and to closely coordinate DARPA efforts with an increasing number of multidisciplinary scientific endeavors, such as information technology, human systems integration, energy and power, and unmanned systems.

The committee directs the Secretary to submit details of the Department's review process with DARPA's strategic plan and the fiscal year 2006 budget request.

#### **Energy and power technologies**

The committee notes that energy and power technologies are a key enabler of military activity. Development of compact, rugged, cost-effective power sources, which are deployable in forms that support all of the various missions of the Department of Defense, is a component of force transformation and supports new

warfighting capabilities. The committee notes that the Director of Defense Research and Engineering (DDRE) has initiated the Energy and Power Technology Initiative, a comprehensive, Department-wide effort to explore capability-enabling power technologies.

The committee directs the DDRE to submit a report to the congressional defense committees outlining the goals of the Energy and Power Technology Initiative. The report should include: details of coordination efforts with ongoing projects within the department, with other federal departments and agencies, and with the private sector; technology transition strategies; information on program elements and projects included in the initiative; and future years' investment plans for programs in the initiative. The report should also include an assessment of the military value of various power technologies being explored for applications to light and heavy duty vehicles, weapons, aircraft and unmanned systems, ships, dismounted units, and stationary, and mobile power production facilities.

#### **Future medical shelter systems**

The committee understands that the Army Medical Research and Materiel Command is developing a Future Medical Shelter System to replace current systems, including deployable operating rooms that will have decreased size and weight and increased capability. These new shelters will result in a lighter, more mobile and deployable medical force. The committee expects the Army to continue development of systems that can meet the requirements of the future force and provide needed mobile medical services.

#### **Integration of science and technology planning with defense intelligence community requirements**

The committee commends the Department of Defense's pilot program to integrate the defense intelligence community into the Department's science and technology (S&T) planning process. The pilot is designed to ensure that the Department is able to identify and respond to foreign S&T programs that could potentially defeat or diminish U.S. military capabilities in the near-term and into the future. The technology community relies on information from the intelligence community to prevent technological surprise and to advance needed technologies. The current S&T planning process does not explicitly address foreign threats, yet technological surprise from this area poses a serious danger to U.S. forces. The committee supports the Department's effort to improve integration between the defense S&T and defense intelligence communities, and directs the Department to submit a progress report to the congressional defense committees on the integration program and its impact on the S&T planning process by January 1, 2005.

#### **Joint Tactical Radio System logistics waveform**

The Joint Tactical Radio System (JTRS) program will provide software programmable, reconfigurable digital radio systems to meet Joint Vision 2020 requirements for interoperability, flexibility, adaptability, and information exchange. The program is currently developing more than 100 waveforms as part of this initiative. Although these waveforms will be integrated into JTRS, they

will be tested for functionality separately, a time consuming and relatively expensive process. The committee believes that a different approach should be taken, such as a logistics waveform. A logistics waveform is a test waveform that would travel through the JTRS, similar to an information-transmitting waveform, ensuring that all JTRS components are working properly. The committee believes that the Department of Defense should investigate the feasibility and advisability of using a single logistics waveform or a small series of logistics waveforms to test the functionality of all JTRS waveforms to reduce time and costs. The committee directs the Secretary of Defense to conduct a study of the feasibility and advisability of using logistics waveforms as part of the JTRS test strategy for the JTRS program. The study will determine the feasibility and advisability of using a single logistics waveform or a small series of logistics waveforms for readiness and maintenance testing. The Secretary will submit a report on the results of the study to the congressional defense committees with the submission of the fiscal year 2006 President's budget request.

#### **Management of hard and deeply buried target program efforts**

The committee understands that a complex, broad, and multifaceted effort is required to achieve the capability to physically or functionally defeat hard and deeply buried targets (HDBTs). The effort to deploy systems to defeat HDBTs is coordinated by the Office of the Secretary of Defense (OSD) and takes advantage of a large number of ongoing research and development and procurement efforts that have counter-HDBT capabilities. The committee believes that this approach has been cost-effective to date. The committee also believes that this coordination could be improved with the creation of a dedicated program element and a management structure within OSD that would have the resources to conduct more extensive and disciplined analyses of alternatives, integration, and trade studies and the authority to encourage service efforts important to the HDBT effort. The committee urges the Secretary of Defense to consider these steps for fiscal year 2006.

#### **Manufacturing technology**

The committee notes that manufacturing has played a vital role in the development and production of national security systems. The globalization of the manufacturing industry, defense industry consolidation, and rapid technological changes have taken their toll on the national defense manufacturing base. The committee believes that a renewed emphasis on developing transformational breakthroughs in manufacturing technologies and processes would aid in the preservation of the manufacturing base, help reduce the cost of weapons systems, improve the nation's global economic competitiveness, and reduce fielding times for new systems.

The committee directs the Director of Defense Research and Engineering to consider establishing a memorandum of agreement between the Defense Advanced Research Projects Agency and the Joint Defense ManTech Panel to identify, develop, and deploy transformational manufacturing technologies and processes that are required to help meet future force requirements. The agree-

ment would accelerate the transition of revolutionary technologies developed by the Defense Advanced Research Projects Agency (DARPA) into the defense industrial base, and would ensure that revolutionary manufacturing technologies and research programs receive focused and coordinated management.

The committee also directs the Director of Defense Research and Engineering to consider establishing and funding a separate science and technology program element for the development of transformational manufacturing technologies as a component of the existing Manufacturing Technology program. The joint cross-service program would be managed by the Joint Defense ManTech Panel, thereby increasing the effectiveness of the individual service and Defense Logistics Agency ManTech programs by establishing a new effort on synergistic, transformational manufacturing technologies, processes, and technology testbeds that would best support the development of joint warfighting capabilities. Existing service-specific manufacturing technology programs would continue their focused efforts and support for the tailored demands of their service partners.

#### **Maximizing technology in urban combat operations**

Over the past decade, U.S. forces have been involved in numerous operations that have taken place in urban areas. The lessons learned from these operations, including Operation Iraqi Freedom (OIF), suggest that U.S. forces could benefit from technological advances relevant to combat in an urban environment. The committee is particularly interested in technology that could help counter threats such as the employment of improvised explosive devices (IEDs).

While the committee is aware that the Department of Defense is developing future technologies to improve operational capabilities in urban environments, the committee believes that the Department must increase its efforts to ensure that the military services employ all available sensor-based assets to the maximum extent possible to acquire, identify, and defeat IEDs. The military services must work closely to provide one another the assets to provide flexible solutions to maximize counter IED capabilities. The Department is encouraged to increase its efforts to identify counter IED technology and to deploy any asset available in the Department to counter the IED threat.

#### **Patriot report**

The committee notes that during Operation Iraqi Freedom, the Patriot air and missile defense system successfully intercepted nine Iraqi ballistic missiles, but was also involved in several friendly fire incidents. The committee understands that the technical analysis on the causes of the friendly fire incidents has been completed, but that a report on this analysis has not been issued to Congress.

The committee notes that section 1202 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) requires a report by the Secretary of Defense on the conduct of Operation Iraqi Freedom. The required report must include a discussion of the accomplishments and shortcomings of major items of U.S. military equipment and weapons systems, incidence of accidental



fratricide, and near- and long-term corrective actions to address identified shortcomings. The committee expects that the Secretary will include a description of the technical analysis on the causes of and corrective actions related to the Patriot friendly fire incidents as part of the report required by section 1202.

### **Space-based radar**

The budget request included \$327.7 million in PE 63858F for the space-based radar (SBR) program. The committee recommends the requested amount.

The committee recognizes the benefits of persistent surveillance and the key role of a space-based radar system to provide all-weather, day/night capabilities in an architecture that provides such persistence. The committee remains strongly supportive of the SBR program.

The committee is aware that the cost estimated for the notional SBR architecture selected by the Air Force is substantially higher than the cost of any other U.S. satellite system. The committee recognizes that this estimate is preliminary and contingent on the selection of an SBR architecture and technologies. Nevertheless, the estimate raises concern about the ultimate affordability of an SBR system.

Consequently, the committee believes that the SBR development will require the Air Force and the SBR contractors to put a premium on innovative technical and architectural concepts to produce an affordable system. The committee commends the Air Force for revising the acquisition strategy for SBR to accommodate two contractors and multiple concepts in the early phases of the program. The committee notes, however, that the acquisition strategy calls for the contractors to select their most promising alternative shortly after the contract award. The committee is concerned that a premature down-select will limit the innovation needed in this effort. The committee strongly encourages the Department of Defense Executive Agent for Space to ensure that the acquisition strategy offers the best possibility for innovation and to consider affordability as a key independent criterion on which to judge competing SBR proposals.

### **Study of joint strike fighter refueling system**

The joint strike fighter (JSF) aircraft is in the systems development and demonstration phase. The JSF represents a family of three variants: (1) the conventional takeoff and landing (CTOL) variant for the Air Force; (2) the aircraft carrier (CV) variant for the Navy; and (3) the short takeoff and vertical landing (STOVL) variant for the Marine Corps.

U.S. tactical aircraft use two different methods of refueling. Air Force tactical aircraft are fueled by a boom that extends from the tanker and is guided into a receptacle. Navy and Marine Corps tactical aircraft use a probe that extends from the aircraft to receive fuel from a drogue that the tanker extends on a hose. Tactical aircraft from other countries also use the probe and drogue method.

The JSF program claims to maximize commonality among its family of variants. The committee is interested in why this commonality did not extend to the refueling system for the family of

JSF variants. The committee directs the Comptroller General (U.S.) to submit a report by February 1, 2005, which: (1) examines the rationale behind the decision of the Air Force to retain the boom method of refueling the CTOL JSF; (2) determines the savings, if any, if the Air Force were to decide to change to the probe and drogue method of refueling the CTOL JSF; and (3) determines what operational advantages or disadvantages, if any, would result if the Air Force were to decide to change to the probe and drogue method of refueling the CTOL JSF.

### **TITLE III—OPERATION AND MAINTENANCE**

#### **Explanation of tables**

The following tables provide the program-level detailed guidance for the funding authorized in title III of this Act. The tables also display the funding requested by the administration in the fiscal year 2005 budget request for operation and maintenance programs, and indicate those programs for which the committee either increased or decreased the requested amounts. As in the past, the administration may not exceed the authorized amounts (as set forth in the tables or, if unchanged from the administration request, as set forth in budget justification documents of the Department of Defense) without a reprogramming action in accordance with established procedures. Unless noted in this report, funding changes to the budget request are made without prejudice.

**NATIONAL DEFENSE AUTHORIZATION FOR FISCAL YEAR 2005**  
(Dollars in Thousands)

	<u>FY2005</u>	<u>Senate</u>	<u>Senate</u>
	<u>Request</u>	<u>Change</u>	<u>Authorized</u>
<b>Title III – OPERATION AND MAINTENANCE &amp; OTHER PROGRAMS</b>			
<b>OPERATION AND MAINTENANCE</b>			
Operation and Maintenance, Army	26,133,411	172,200	26,305,611
Operation and Maintenance, Navy	29,789,190	-86,400	29,702,790
Operation and Maintenance, MC	3,632,115	50,612	3,682,727
Operation and Maintenance, AF	28,471,260	-1,047,700	27,423,560
Operation and Maintenance, Defense-wide	17,494,076	-40,500	17,453,576
Operation and Maintenance, Army Reserve	2,008,128	-82,400	1,925,728
Operation and Maintenance, Navy Reserve	1,240,038	0	1,240,038
Operation and Maintenance, Marine Corps Reserve	188,696	8,800	197,496
Operation and Maintenance, Air Force Reserve	2,239,790	-85,000	2,154,790
Operation and Maintenance, Army National Guard	4,440,686	-213,450	4,227,236
Operation and Maintenance, Air National Guard	4,422,838	-56,100	4,366,738
Transfer Accounts	1,305,336	44,650	1,349,986
Miscellaneous Appropriations	509,025	-30,000	479,025
<b>SUBTOTAL OPERATION AND MAINTENANCE</b>	<b>121,874,589</b>	<b>-1,365,288</b>	<b>120,509,301</b>
<b>OTHER PROGRAMS</b>			
Defense Health Program, O&M	17,203,369	351,800	17,555,169
Reserve health benefits		[400,000]	
Retail pharmacy benefit		[-44,000]	
Walter Reed amputee care		[7,800]	
Traumatic brain injury		[2,000]	
Financial information systems		[-14,000]	
Defense Health Program, RDTE	72,407		72,407
Defense Health Program, Procurement	364,635		364,635
<b>Subtotal Defense Health Program</b>	<b>17,640,411</b>	<b>351,800</b>	<b>17,992,211</b>

**NATIONAL DEFENSE AUTHORIZATION FOR FISCAL YEAR 2005**  
(Dollars in 'Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Drug Interdiction and Counter-Drug Activities	852,697		852,697
<b>Subtotal Drug Interdiction and Counter-Drug Activities</b>	<b>852,697</b>	<b>0</b>	<b>852,697</b>
Office of the Inspector General, O&M	242,362	-80,000	162,362
Financial audits		[-80,000]	
Office of the Inspector General, RDTE	100		100
Office of the Inspector General, Procurement	2,100		2,100
<b>Subtotal Office of the Inspection General</b>	<b>244,562</b>	<b>-80,000</b>	<b>164,562</b>
Chemical Agents and Munitions Destruction, O&M	1,138,801		1,138,801
Chemical Agents and Munitions Destruction, RDTE	154,209	147,000	301,209
Chemical agent disposal facility-Pueblo, CO		[147,000]	
Chemical Agents and Munitions Destruction, Procurement	78,980		78,980
<b>Subtotal Chemical Agents and Munitions Destruction</b>	<b>1,371,990</b>	<b>147,000</b>	<b>1,518,990</b>
<b>SUBTOTAL OTHER PROGRAMS</b>	<b>20,109,660</b>	<b>418,800</b>	<b>20,528,460</b>
<b><u>REVOLVING AND MANAGEMENT FUNDS</u></b>			
Defense Working Capital Funds	510,886	-60,200	450,686
Financial information systems		[-60,200]	
Defense Working Capital Funds - DeCA	1,175,000		1,175,000
National Defense Sealift Fund	1,269,252		1,269,252
Armed Forces Retirement Home	[61,195]		
<b>SUBTOTAL REVOLVING AND MANAGEMENT FUNDS</b>	<b>2,955,138</b>	<b>-60,200</b>	<b>2,894,938</b>
<b>TOTAL O&amp;M AND OTHER PROGRAMS</b>	<b>144,939,387</b>	<b>-1,006,688</b>	<b>143,932,699</b>

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		Operation and Maintenance, Army			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>LAND FORCES</u>			
2020a	1	DIVISIONS	1,520,706		1,520,706
2020a	2	CORPS COMBAT FORCES	472,692		472,692
2020a	3	CORPS SUPPORT FORCES	445,344		445,344
2020a	4	ECHELON ABOVE CORPS SUPPORT FORCES	515,730		515,730
2020a	5	LAND FORCES OPERATIONS SUPPORT	1,197,822	1,000	1,198,822
		Forward osmosis water filtration system		[1,000]	
		<u>LAND FORCES READINESS</u>			
2020a	6	FORCE READINESS OPERATIONS SUPPORT	1,787,147	557,000	2,344,147
		Rapid fielding initiative (RFI)		[262,000]	
		Interceptor body armor		[295,000]	
2020a	7	LAND FORCES SYSTEMS READINESS	537,567	8,000	545,567
		Corrosion prevention and control		[8,000]	
2020a	8	LAND FORCES DEPOT MAINTENANCE	1,031,105	21,900	1,053,005
		MIA1 transmission maintenance		[21,900]	
		<u>LAND FORCES READINESS SUPPORT</u>			
2020a	9	BASE OPERATIONS SUPPORT	5,609,973		5,609,973

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2020a	10	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	1,956,128		1,956,128
2020a	11	MANAGEMENT & OPERATIONAL HEADQUARTERS	251,474		251,474
2020a	12	UNIFIED COMMANDS	94,850		94,850
2020a	13	MISCELLANEOUS ACTIVITIES	1,057,943		1,057,943
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>16,478,481</b>	<b>587,900</b>	<b>17,066,381</b>
		<b><u>BUDGET ACTIVITY 02: MOBILIZATION</u></b>			
		<b><u>MOBILITY OPERATIONS</u></b>			
2020a	14	STRATEGIC MOBILIZATION	327,345	4,000	331,345
		Specialty containers		[4,000]	
2020a	15	ARMY PREPOSITIONED STOCKS	126,163		126,163
2020a	16	INDUSTRIAL PREPAREDNESS	8,491		8,491
2020a	17	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION			
		<b>TOTAL, BA 02: MOBILIZATION</b>	<b>461,999</b>	<b>4,000</b>	<b>465,999</b>
		<b><u>BUDGET ACTIVITY 03: TRAINING AND RECRUITING</u></b>			
		<b><u>ACCESSION TRAINING</u></b>			
2020a	18	OFFICER ACQUISITION	107,554		107,554

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2020a	19	RECRUIT TRAINING	20,766		20,766
2020a	20	ONE STATION UNIT TRAINING	41,961		41,961
2020a	21	SENIOR RESERVE OFFICERS' TRAINING CORPS	234,308		234,308
2020a	22	BASE OPERATIONS SUPPORT			
2020a	23	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION			
<b><u>BASIC SKILL/ ADVANCE TRAINING</u></b>					
2020a	24	SPECIALIZED SKILL TRAINING	506,557	5,600	512,157
		Army Defense Language Institute (SCOLA)		[5,600]	
2020a	25	FLIGHT TRAINING	575,406		575,406
2020a	26	PROFESSIONAL DEVELOPMENT EDUCATION	102,832		102,832
2020a	27	TRAINING SUPPORT	618,519		618,519
2020a	28	BASE OPERATIONS SUPPORT			
2020a	29	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION			
<b><u>RECRUITING/OTHER TRAINING</u></b>					
2020a	30	RECRUITING AND ADVERTISING	461,157		461,157
2020a	31	EXAMINING	131,206		131,206
2020a	32	OFF-DUTY AND VOLUNTARY EDUCATION	296,311		296,311
2020a	33	CIVILIAN EDUCATION AND TRAINING	111,003		111,003
2020a	34	JUNIOR RESERVE OFFICERS' TRAINING CORPS	137,331		137,331



### Title III - Operation and Maintenance

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2020a	35	BASE OPERATIONS SUPPORT			
		TOTAL, BA 03: TRAINING AND RECRUITING	3,344,911	5,600	3,350,511
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			
		<u>SECURITY PROGRAMS</u>			
2020a	36	SECURITY PROGRAMS	883,510		883,510
		<u>LOGISTICS OPERATIONS</u>			
2020a	37	SERVICEWIDE TRANSPORTATION	570,923		570,923
2020a	38	CENTRAL SUPPLY ACTIVITIES	490,261	1,000	491,261
		Management training		[1,000]	
2020a	39	LOGISTICS SUPPORT ACTIVITIES	439,466	1,400	440,866
		RFID		[1,400]	
2020a	40	AMMUNITION MANAGEMENT	356,607		356,607
		<u>SERVICEWIDE SUPPORT</u>			
2020a	41	ADMINISTRATION	702,719		702,719
2020a	42	SERVICEWIDE COMMUNICATIONS	610,866		610,866
2020a	43	MANPOWER MANAGEMENT	267,365		267,365
2020a	44	OTHER PERSONNEL SUPPORT	191,686		191,686

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2020a	45	OTHER SERVICE SUPPORT	848,391		848,391
2020a	46	ARMY CLAIMS	115,453		115,453
2020a	47	REAL ESTATE MANAGEMENT	60,633		60,633
2020a	48	BASE OPERATIONS SUPPORT			
2020a	49	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION			
2020a	50	COMMISSARY OPERATIONS			
		<b>SUPPORT OF OTHER NATIONS</b>			
2020a	51	SUPPORT OF NATO OPERATIONS	250,026		250,026
2020a	52	MISC. SUPPORT OF OTHER NATIONS	60,114		60,114
2020a	53	EXPANSION OF NATO			
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>5,848,020</b>	<b>2,400</b>	<b>5,850,420</b>
		Civilian personnel underexecution		-81,900	-81,900
		WCF excess balances		-250,000	-250,000
		WCF excess carryover		-100,000	-100,000
		WMD-CSTs		4,200	4,200
		<b>Total Operation and Maintenance, Army</b>	<b>26,133,411</b>	<b>172,200</b>	<b>26,305,611</b>

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005</u>	<u>Senate</u>	<u>Senate</u>
			<u>Request</u>	<u>Change</u>	<u>Authorized</u>
		Operation and Maintenance, Navy			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>AIR OPERATIONS</u>			
1804n	1	MISSION AND OTHER FLIGHT OPERATIONS	3,002,769		3,002,769
1804n	2	FLEET AIR TRAINING	1,066,452		1,066,452
1804n	3	INTERMEDIATE MAINTENANCE	66,565		66,565
1804n	4	AIR OPERATIONS AND SAFETY SUPPORT	111,146		111,146
1804n	5	AIR SYSTEMS SUPPORT	498,508		498,508
1804n	6	AIRCRAFT DEPOT MAINTENANCE	995,596		995,596
1804n	7	AIRCRAFT DEPOT OPERATIONS SUPPORT	67,980		67,980
		<u>SHIP OPERATIONS</u>			
1804n	8	MISSION AND OTHER SHIP OPERATIONS	2,604,963		2,604,963
1804n	9	SHIP OPERATIONAL SUPPORT AND TRAINING	622,119	2,000	624,119
		NULKA decoy cartridge		[2,000]	
1804n	10	INTERMEDIATE MAINTENANCE			
1804n	11	SHIP DEPOT MAINTENANCE	3,910,439	70,000	3,980,439
		CVN73, SSN708, SSN709		[70,000]	
1804n	12	SHIP DEPOT OPERATIONS SUPPORT	1,113,910		1,113,910

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>COMBAT OPERATIONS/SUPPORT</u>			
1804n	13	COMBAT COMMUNICATIONS	379,929	1,000	380,929
		Manufacturing Technical Assistance and Production Program		[1,000]	
1804n	14	ELECTRONIC WARFARE	16,946		16,946
1804n	15	SPACE SYSTEMS & SURVEILLANCE	136,231		136,231
1804n	16	WARFARE TACTICS	266,032		266,032
1804n	17	OPERATIONAL METEOROLOGY & OCEANOGRAPHY	256,003		256,003
1804n	18	COMBAT SUPPORT FORCES	1,362,179		1,362,179
1804n	19	EQUIPMENT MAINTENANCE	186,658		186,658
1804n	20	DEPOT OPERATIONS SUPPORT	3,214		3,214
		<u>WEAPONS SUPPORT</u>			
1804n	21	CRUISE MISSILE	155,731		155,731
1804n	22	FLEET BALLISTIC MISSILE	830,393		830,393
1804n	23	IN-SERVICE WEAPONS SYSTEMS SUPPORT	51,043		51,043
1804n	24	WEAPONS MAINTENANCE	447,327		447,327
		<u>WORKING CAPITAL FUND SUPPORT</u>			
1804n	25	NWCF SUPPORT			
		<u>BASE SUPPORT</u>			
1804n	26	SUSTAINMENT, RESTORATION & MODERNIZATION	1,330,363		1,330,363

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1804n	27	BASE OPERATIONS SUPPORT	3,195,350		3,195,350
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>22,677,846</b>	<b>73,000</b>	<b>22,750,846</b>
		<u><b>BUDGET ACTIVITY 02: MOBILIZATION</b></u>			
		<u><b>READY RESERVE AND PREPOSITIONING FORCES</b></u>			
1804n	28	SHIP PREPOSITIONING AND SURGE	548,199		548,199
		<u><b>ACTIVATIONS/INACTIVATIONS</b></u>			
1804n	29	AIRCRAFT ACTIVATIONS/INACTIVATIONS	7,619		7,619
1804n	30	SHIP ACTIVATIONS/INACTIVATIONS	212,393		212,393
		<u><b>MOBILIZATION PREPAREDNESS</b></u>			
1804n	31	FLEET HOSPITAL PROGRAM	26,119		26,119
1804n	32	INDUSTRIAL READINESS	1,523		1,523
1804n	33	COAST GUARD SUPPORT	17,185		17,185
		<b>TOTAL, BA 02: MOBILIZATION</b>	<b>813,038</b>		<b>813,038</b>
		<u><b>BUDGET ACTIVITY 03: TRAINING AND RECRUITING</b></u>			

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>ACCESSION TRAINING</u>			
1804n	34	OFFICER ACQUISITION	120,835		120,835
1804n	35	RECRUIT TRAINING	7,716		7,716
1804n	36	RESERVE OFFICERS TRAINING CORPS	102,336		102,336
		<u>BASIC SKILLS AND ADVANCED TRAINING</u>			
1804n	37	SPECIALIZED SKILL TRAINING	434,374		434,374
1804n	38	FLIGHT TRAINING	420,829		420,829
1804n	39	PROFESSIONAL DEVELOPMENT EDUCATION	116,770		116,770
1804n	40	TRAINING SUPPORT	238,246		238,246
		<u>RECRUITING, AND OTHER TRAINING AND EDUCATION</u>			
1804n	41	RECRUITING AND ADVERTISING	282,526		282,526
1804n	42	OFF-DUTY AND VOLUNTARY EDUCATION	146,508		146,508
1804n	43	CIVILIAN EDUCATION AND TRAINING	67,556		67,556
1804n	44	JUNIOR ROTC	39,900		39,900
		<u>BASE SUPPORT</u>			
1804n	45	SUSTAINMENT, RESTORATION & MODERNIZATION			
1804n	46	BASE OPERATIONS SUPPORT			
		<b>TOTAL, BA 03: TRAINING AND RECRUITING</b>	<b>1,977,596</b>		<b>1,977,596</b>

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
<b><u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u></b>					
<b><u>SERVICEWIDE SUPPORT</u></b>					
1804n	47	ADMINISTRATION	773,940		773,940
1804n	48	EXTERNAL RELATIONS	3,893		3,893
1804n	49	CIVILIAN MANPOWER & PERSONNEL MGT	110,614		110,614
1804n	50	MILITARY MANPOWER & PERSONNEL MGT	198,465		198,465
1804n	51	OTHER PERSONNEL SUPPORT	317,284		317,284
1804n	52	SERVICEWIDE COMMUNICATIONS	605,415		605,415
1804n	53	MEDICAL ACTIVITIES			
<b><u>LOGISTICS OPERATIONS AND TECHNICAL SUPPORT</u></b>					
1804n	54	SERVICEWIDE TRANSPORTATION	189,634		189,634
1804n	55	ENVIRONMENTAL PROGRAMS			
1804n	56	PLANNING, ENGINEERING & DESIGN	252,972		252,972
1804n	57	ACQUISITION AND PROGRAM MANAGEMENT	840,666		840,666
1804n	58	AIR SYSTEMS SUPPORT			
1804n	59	HULL, MECHANICAL & ELECTRICAL SUPPORT	55,505		55,505
1804n	60	COMBAT/WEAPONS SYSTEMS	51,683		51,683
1804n	61	SPACE & ELECTRONIC WARFARE SYSTEMS	70,166		70,166

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1804n		<u>SECURITY PROGRAMS</u>			
	62	SECURITY PROGRAMS	839,870		839,870
1804n		<u>SUPPORT OF OTHER NATIONS</u>			
	63	INTERNATIONAL HDQTRS & AGENCIES	10,603		10,603
1804n		<u>BASE SUPPORT</u>			
	64	CANCELLED ACCOUNT ADJUSTMENTS			
1804n	65	JUDGEMENT FUND			
1804n		<u>CANCELLED ACCOUNTS</u>			
	66	CANCELLED ACCOUNT			
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>4,320,710</b>		<b>4,320,710</b>
		Civilian personnel underexecution		-11,800	-11,800
		WCF excess balances		-200,000	-200,000
		Additional Navy MWR funds		52,400	52,400
		<b>Total Operation and Maintenance, Navy</b>	<b>29,789,190</b>	<b>-86,400</b>	<b>29,702,790</b>



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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		Operation and Maintenance, Marine Corps			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>EXPEDITIONARY FORCES</u>			
1106n	1	OPERATIONAL FORCES	633,914	37,400	671,314
		Interceptor body armor		[14,400]	
		General property and support equipment		[9,000]	
		All-purpose environmental clothing system		[4,800]	
		Ultra-light camouflage net system		[9,200]	
1106n	2	FIELD LOGISTICS	367,293	4,000	371,293
		Corrosion prevention and control		[4,000]	
1106n	3	DEPOT MAINTENANCE	102,085		102,085
		<u>USMC PREPOSITIONING</u>			
1106n	4	MARITIME PREPOSITIONING	72,128		72,128
1106n	5	NORWAY PREPOSITIONING	7,763		7,763
		<u>BASE SUPPORT</u>			
1106n	6	SUSTAINMENT, RESTORATION & MODERNIZATION	451,012		451,012

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1106n	7	BASE OPERATIONS SUPPORT Communications support for USMC NOC	1,026,795	9,212 [9,212]	1,036,007
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>2,660,990</b>	<b>50,612</b>	<b>2,711,602</b>
<b><u>BUDGET ACTIVITY 03: TRAINING AND RECRUITING</u></b>					
		<b><u>ACCESSION TRAINING</u></b>			
1106n	8	RECRUIT TRAINING	10,539		10,539
1106n	9	OFFICER ACQUISITION	351		351
		<b><u>BASIC SKILLS AND ADVANCED TRAINING</u></b>			
1106n	10	SPECIALIZED SKILLS TRAINING	45,155		45,155
1106n	11	FLIGHT TRAINING	174		174
1106n	12	PROFESSIONAL DEVELOPMENT EDUCATION	8,972		8,972
1106n	13	TRAINING SUPPORT	134,241		134,241
		<b><u>RECRUITING AND OTHER TRAINING EDUCATION</u></b>			
1106n	14	RECRUITING AND ADVERTISING	113,988		113,988
1106n	15	OFF-DUTY AND VOLUNTARY EDUCATION	34,336		34,336
1106n	16	JUNIOR ROTC	13,270		13,270

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>BASE SUPPORT</u>			
1106n	17	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	68,553		68,553
1106n	18	BASE OPERATIONS SUPPORT	162,579		162,579
		<b>TOTAL, BA 03: TRAINING AND RECRUITING</b>	<b>592,158</b>		<b>592,158</b>
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			
		<u>SERVICEWIDE SUPPORT</u>			
1106n	19	SPECIAL SUPPORT	274,508		274,508
1106n	20	SERVICEWIDE TRANSPORTATION	37,300		37,300
1106n	21	ADMINISTRATION	45,271		45,271
		<u>CANCELLED ACCOUNT</u>			
1106n	31	CANCELLED ACCOUNT			
		<u>BASE SUPPORT</u>			
1106n	17	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	3,191		3,191

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1106n	18	BASE OPERATIONS SUPPORT	18,697		18,697
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>378,967</b>		<b>357,079</b>
		<b>Total Operation and Maintenance, Marine Corps</b>	<b>3,632,115</b>	<b>50,612</b>	<b>3,682,727</b>
<b>Operation and Maintenance, Air Force</b>					
<b><u>BUDGET ACTIVITY 01: OPERATING FORCES</u></b>					
<b><u>AIR OPERATIONS</u></b>					
3400f	1	PRIMARY COMBAT FORCES	3,275,334		3,275,334
3400f	2	PRIMARY COMBAT WEAPONS	331,333		331,333
3400f	3	COMBAT ENHANCEMENT FORCES	346,322		346,322
3400f	4	AIR OPERATIONS TRAINING	1,274,599		1,274,599
3400f	5	COMBAT COMMUNICATIONS	1,318,159		1,318,159
3400f	6	DEPOT MAINTENANCE	2,085,761	-39,300	2,046,461
		Transfer to Air National Guard		[-39,300]	
3400f	7	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	1,017,301	600	1,017,901
		Drop zone extension		[600]	
3400f	8	BASE SUPPORT	1,995,494		1,995,494

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005</u> <u>Request</u>	<u>Senate</u> <u>Change</u>	<u>Senate</u> <u>Authorized</u>
		<u>COMBAT RELATED OPERATIONS</u>			
3400f	9	GLOBAL C3I & EARLY WARNING	1,147,163		1,147,163
3400f	10	NAVIGATION/WEATHER SUPPORT	204,543		204,543
3400f	11	OTHER COMBAT OPERATIONS SUPPORT PROGRAMS	622,524		622,524
3400f	12	JCS EXERCISES	32,756		32,756
3400f	13	MANAGEMENT/OPERATIONAL HEADQUARTERS	240,380		240,380
3400f	14	TACTICAL INTELLIGENCE AND SPECIAL ACTIVITIES	340,102		340,102
		<u>SPACE OPERATIONS</u>			
3400f	15	LAUNCH FACILITIES	343,565		343,565
3400f	16	LAUNCH VEHICLES	100,135		100,135
3400f	17	SPACE CONTROL SYSTEMS	237,995		237,995
3400f	18	SATELLITE SYSTEMS	68,655		68,655
3400f	19	OTHER SPACE OPERATIONS	258,376		258,376
3400f	20	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	171,469		171,469
3400f	21	BASE SUPPORT	528,332		528,332
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>15,940,298</b>	<b>-38,700</b>	<b>15,901,598</b>

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<b><u>BUDGET ACTIVITY 02: MOBILIZATION</u></b>			
		<b><u>MOBILITY OPERATIONS</u></b>			
3400f	22	AIRLIFT OPERATIONS	1,919,987		1,919,987
3400f	23	AIRLIFT OPERATIONS C3I	51,824		51,824
3400f	24	MOBILIZATION PREPAREDNESS	170,623		170,623
3400f	25	PAYMENTS TO TRANSPORTATION BUSINESS AREA			
3400f	26	DEPOT MAINTENANCE	410,679	21,100	431,779
		Transfer to Air National Guard		[-39,500]	
		Oxygen repair facility		[600]	
		Depot Maintenance for KC-135		[60,000]	
3400f	27	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	200,928		200,928
3400f	28	BASE SUPPORT	537,718		537,718
		<b>TOTAL, BA 02: MOBILIZATION</b>	<b>3,291,759</b>	<b>21,100</b>	<b>3,312,859</b>
		<b><u>BUDGET ACTIVITY 03: TRAINING AND RECRUITING</u></b>			
		<b><u>ACCESSION TRAINING</u></b>			
3400f	29	OFFICER ACQUISITION	73,788		73,788
3400f	30	RECRUIT TRAINING	6,034		6,034
3400f	31	RESERVE OFFICER TRAINING CORPS (ROTC)	84,381		84,381

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
3400f	32	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	85,892		85,892
3400f	33	BASE SUPPORT	71,777		71,777
		<b><u>BASIC SKILLS AND ADVANCED TRAINING</u></b>			
3400f	34	SPECIALIZED SKILL TRAINING	336,818		336,818
3400f	35	FLIGHT TRAINING	775,819		775,819
3400f	36	PROFESSIONAL DEVELOPMENT EDUCATION	158,967		158,967
3400f	37	TRAINING SUPPORT	108,450		108,450
3400f	38	DEPOT MAINTENANCE	12,914		12,914
3400f	39	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	190,592		190,592
3400f	40	BASE SUPPORT	584,857		584,857
		<b><u>RECRUITING, AND OTHER TRAINING AND EDUCATION</u></b>			
3400f	41	RECRUITING AND ADVERTISING	143,369		143,369
3400f	42	EXAMINING	3,281		3,281
3400f	43	OFF DUTY AND VOLUNTARY EDUCATION	159,129		159,129
3400f	44	CIVILIAN EDUCATION AND TRAINING	158,738		158,738
3400f	45	JUNIOR ROTC	50,108		50,108
		<b>TOTAL, BA 03: TRAINING AND RECRUITING</b>	<b>3,004,914</b>		<b>3,004,914</b>

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<b><u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u></b>			
		<b><u>LOGISTICS OPERATIONS</u></b>			
3400f	46	LOGISTICS OPERATIONS	883,478	3,000	886,478
		RFID		[3,000]	
3400f	47	TECHNICAL SUPPORT ACTIVITIES	432,323		432,323
3400f	48	SERVICEWIDE TRANSPORTATION	171,501		171,501
3400f	49	DEPOT MAINTENANCE	105,158		105,158
3400f	50	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	260,580		260,580
3400f	51	BASE SUPPORT	1,072,242		1,072,242
		<b><u>SERVICEWIDE ACTIVITIES</u></b>			
3400f	52	ADMINISTRATION	299,617		299,617
3400f	53	SERVICEWIDE COMMUNICATIONS	377,574		377,574
3400f	54	PERSONNEL PROGRAMS	262,281		262,281
3400f	55	RESCUE AND RECOVERY SERVICES	129,437		129,437
3400f	56	ARMS CONTROL	41,645		41,645
3400f	57	OTHER SERVICEWIDE ACTIVITIES	728,942		728,942
3400f	58	OTHER PERSONNEL SUPPORT	39,457		39,457
3400f	59	CIVIL AIR PATROL CORPORATION	21,722		21,722
3400f	60	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	12,848		12,848
3400f	61	BASE SUPPORT	345,170		345,170



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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
3400f	63	<u>SECURITY PROGRAMS</u>			
		SECURITY PROGRAMS	1,024,129		1,024,129
3400f	63	<u>SUPPORT TO OTHER NATIONS</u>			
		INTERNATIONAL SUPPORT	26,185		26,185
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>6,234,289</b>	<b>3,000</b>	<b>6,237,289</b>
		NORTHCOM HS/HD education consortium		1,000	1,000
		Simulation training for WMD emergency response programs		2,500	2,500
		Transportation WCF		-640,000	-640,000
		Civilian personnel underexecution		-36,600	-36,600
		WCF excess balances		-360,000	-360,000
		<b>Total Operation and Maintenance, Air Force</b>	<b>28,471,260</b>	<b>-1,047,700</b>	<b>27,423,560</b>

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<b>Operation and Maintenance, Defense-wide</b>			
		<b><u>BUDGET ACTIVITY 1: OPERATING FORCES</u></b>			
0100d	1	JOINT CHIEFS OF STAFF	243,062	-11,800	231,262
		JCS exercises-unjustified growth		[-11,800]	
0100d	2	SPECIAL OPERATIONS COMMAND	1,992,613	1,000	1,993,613
		Militarized lightweight tactical all terrain vehicles (LTATV)		[1,000]	
		<b>TOTAL, BUDGET ACTIVITY 1:</b>	<b>2,235,675</b>	<b>-10,800</b>	<b>2,224,875</b>
		<b><u>BUDGET ACTIVITY 2: MOBILIZATION</u></b>			
0100d	3	DEFENSE LOGISTICS AGENCY	40,599	8,000	48,599
		RFID		[8,000]	
		<b>TOTAL, BUDGET ACTIVITY 2:</b>	<b>40,599</b>	<b>8,000</b>	<b>48,599</b>
		<b><u>BUDGET ACTIVITY 3: TRAINING AND RECRUITING</u></b>			
0100d	4	AMERICAN FORCES INFORMATION SERVICE	14,050		14,050
0100d	5	OTHER PROGRAMS			
0100d	6	DEFENSE ACQUISITION UNIVERSITY	103,532		103,532
0100d	7	DEFENSE CONTRACT AUDIT AGENCY	5,296		5,296
0100d	8	DEFENSE THREAT REDUCTION AGENCY	5,968		5,968

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0100d	9	DEFENSE HUMAN RESOURCES ACTIVITY	56,067		56,067
0100d	10	DEFENSE FINANCE AND ACCOUNTING SERVICE			
0100d	11	DEFENSE SECURITY SERVICE	7,343		7,343
0100d	12	NATIONAL DEFENSE UNIVERSITY	90,263		90,263
0100d	13	SPECIAL OPERATIONS COMMAND	96,244		96,244
		<b>TOTAL, BUDGET ACTIVITY 3:</b>	<b>378,763</b>		<b>378,763</b>
		<b>BUDGET ACTIVITY 4: ADMIN &amp; SERVICEWIDE ACTIVITIES</b>			
0100d	14	AMERICAN FORCES INFORMATION SERVICE	110,528		110,528
0100d	15	CIVIL MILITARY PROGRAMS National Guard Youth Challenge Program	101,389	11,000 [11,000]	112,389
0100d	18	DEFENSE CONTRACT AUDIT AGENCY	368,119		368,119
0100d	20	DEFENSE LEGAL SERVICES AGENCY	25,484		25,484
0100d	21	DEFENSE LOGISTICS AGENCY	265,379		265,379
0100d	22	DEFENSE POW /MIA OFFICE	15,964		15,964
0100d	23	DEFENSE TECHNOLOGY SECURITY AGENCY	20,456		20,456
0100d	24	DEFENSE THREAT REDUCTION AGENCY UNWD testbeds	319,483	2,500 [2,500]	321,983
0100d	25	DEPARTMENT OF DEFENSE EDUCATION AGENCY	1,761,852		1,761,852
0100d	26	DOD HUMAN RESOURCES ACTIVITY	318,940		318,940
0100d	27	DEFENSE CONTRACT MANAGEMENT AGENCY	1,029,592		1,029,592

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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
0100d	28	DEFENSE FINANCE AND ACCOUNTING SERVICE	4,310		4,310
0100d	29	DEFENSE INFORMATION SERVICES AGENCY	1,090,558		1,090,558
0100d	30	DEFENSE SECURITY COOPERATION AGENCY	83,922		83,922
0100d	31	DEFENSE SECURITY SERVICE	277,100		277,100
0100d	32	JOINT CHIEFS OF STAFF	278,884		278,884
0100d	34	OFFICE OF ECONOMIC ADJUSTMENT	44,756		44,756
0100d	35	OFFICE OF THE SECRETARY OF DEFENSE	805,813	-20,800	785,013
		Information Assurance Scholarship Program		[3,000]	
		Command Information Superiority Architectures Program		[3,500]	
		Capital cost sharing-eliminate subsidy		[-27,300]	
0100d	36	SPECIAL OPERATIONS COMMAND	142,457		142,457
0100d	37	WASHINGTON HEADQUARTERS SERVICE	447,166		447,166
0100d	99	OTHER PROGRAMS	7,326,887		7,326,887
		<b>TOTAL, BUDGET ACTIVITY 4:</b>	<b>14,839,039</b>	<b>-7,300</b>	<b>14,831,739</b>
		Impact aid		30,000	30,000
		Impact aid for children with disabilities		5,000	5,000
		WCF excess balances		-60,700	-60,700
		Financial information systems		-4,700	-4,700
		<b>Total Operation and Maintenance, Defense-Wide</b>	<b>17,494,076</b>	<b>-40,500</b>	<b>17,453,576</b>

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<b>Operation and Maintenance, Army Reserve</b>			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>LAND FORCES</u>			
2080a	1	DIVISION FORCES	7,640		7,640
2080a	2	CORPS COMBAT FORCES	34,607		34,607
2080a	3	CORPS SUPPORT FORCES	318,411		318,411
2080a	4	ECHOLON ABOVE CORPS FORCES	150,421		150,421
2080a	5	LAND FORCES OPERATIONS SUPPORT	459,134		459,134
		<u>LAND FORCES READINESS</u>			
2080a	6	FORCES READINESS OPERATIONS SUPPORT	153,475		153,475
2080a	7	LAND FORCES SYSTEM READINESS	65,202		65,202
2080a	8	LAND FORCES DEPOT MAINTENANCE	71,548		71,548
		<u>LAND FORCES READINESS SUPPORT</u>			
2080a	9	BASE OPERATIONS SUPPORT	379,112		379,112
2080a	10	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	201,141		201,141

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2080a	11	MISCELLANEOUS ACTIVITIES	7,627		7,627
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>1,848,318</b>		<b>1,848,318</b>
		<b><u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u></b>			
		<b><u>ADMINISTRATION AND SERVICEWIDE ACTIVITIES</u></b>			
2080a	12	ADMINISTRATION	52,180		52,180
2080a	13	SERVICEWIDE COMMUNICATIONS	9,116		9,116
2080a	14	MANPOWER MANAGEMENT	8,201		8,201
2080a	15	RECRUITING AND ADVERTISING	90,313		90,313
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>159,810</b>		<b>159,810</b>
		Military Technicians Cost Avoidance		-82,400	-82,400
		<b>Total Operation and Maintenance, Army Reserve</b>	<b>2,008,128</b>	<b>-82,400</b>	<b>1,925,728</b>

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005</u> <u>Request</u>	<u>Senate</u> <u>Change</u>	<u>Senate</u> <u>Authorized</u>
		Operation and Maintenance, Navy Reserve			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>RESERVE AIR OPERATIONS</u>			
1806n	1	MISSION AND OTHER FLIGHT OPERATIONS	483,526		483,526
1806n	2	INTERMEDIATE MAINTENANCE	16,494		16,494
1806n	3	AIR OPERATIONS AND SAFETY SUPPORT	1,592		1,592
1806n	4	AIRCRAFT DEPOT MAINTENANCE	131,607		131,607
1806n	5	AIRCRAFT DEPOT OPERATIONS SUPPORT	384		384
		<u>RESERVE SHIP OPERATIONS</u>			
1806n	6	MISSION AND OTHER SHIP OPERATIONS	59,127		59,127
1806n	7	SHIP OPERATIONAL SUPPORT AND TRAINING	531		531
1806n	8	INTERMEDIATE MAINTENANCE			
1806n	9	SHIP DEPOT MAINTENANCE	92,787		92,787
1806n	10	SHIP DEPOT OPERATIONS SUPPORT	3,596		3,596
		<u>RESERVE COMBAT OPERATIONS SUPPORT</u>			
1806n	11	COMBAT COMMUNICATIONS	6,732		6,732
1806n	12	COMBAT SUPPORT FORCES	224,589		224,589

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1806n	13	<u>RESERVE WEAPONS SUPPORT</u> WEAPONS MAINTENANCE	5,548		5,548
1806n	14	<u>BASE SUPPORT</u> SUSTAINMENT, RESTORATION AND MODERNIZATION	73,410		73,410
1806n	15	BASE OPERATIONS SUPPORT	108,863		108,863
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>1,208,786</b>		<b>1,208,786</b>
		<b>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>			282
		<u>ADMINISTRATION AND SERVICEWIDE ACTIVITIES</u>			
1806n	16	ADMINISTRATION	6,930		6,930
1806n	17	CIVILIAN MANPOWER AND PERSONNEL MANAGEMENT			
1806n	18	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	8,797		8,797
1806n	19	SERVICEWIDE COMMUNICATIONS	3,347		3,347
1806n	20	COMBAT/WEAPONS SYSTEMS	5,667		5,667
1806n	21	OTHER SERVICEWIDE SUPPORT	6,511		6,511



**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1806n	22	<u>CANCELLED ACCOUNTS</u> CANCELLED ACCOUNTS			
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>31,252</b>		<b>31,252</b>
		<b>Total Operation and Maintenance, Navy Reserve</b>	<b>1,240,038</b>		<b>1,240,038</b>
		<b>Operation and Maintenance, Marine Corps Reserve</b>			
		<b>BUDGET ACTIVITY 01: OPERATING FORCES</b>			
1107n	1	<u>MISSION FORCES</u> OPERATING FORCES Interceptor body armor General property and support equipment All-purpose environmental clothing system Ultra-light camouflage net system	72,940	8,800 [2,200] [3,000] [600] [3,000]	81,740
1107n	2	DEPOT MAINTENANCE	12,132		12,132
1107n	3	BASE SUPPORT			
1107n	4	TRAINING SUPPORT	25,544		25,544
1107n	5	SUSTAINMENT, RESTORATION AND MODERNIZATION			

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>BASE SUPPORT</u>			
1107n	6	SUSTAINMENT, RESTORATION AND MODERNIZATION	12,126		12,126
1107n	7	BASE OPERATING SUPPORT	33,370		33,370
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>156,112</b>	<b>8,800</b>	<b>164,912</b>
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			284
		<u>ADMINISTRATION AND SERVICEWIDE ACTIVITIES</u>			
	8	SPECIAL SUPPORT	8,948		8,948
1107n	9	SERVICE-WIDE TRANSPORTATION	580		580
1107n	10	ADMINISTRATION	10,407		10,407
1107n	11	BASE SUPPORT			
1107n	12	RECRUITING AND ADVERTISING	8,013		8,013

**Title III - Operation and Maintenance**  
(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
1107n	13	BASE SUPPORT	4,636		4,636
		TOTAL, BA 04: ADMINISTRATION & SERVICEWIDE ACTIVITIES	32,584		32,584
		Total Operation and Maintenance, Marine Corps Reserve	188,696	8,800	197,496
Operation and Maintenance, Air Force Reserve					
<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>					
<u>AIR OPERATIONS</u>					
3740f	1	PRIMARY COMBAT FORCES	1,329,717		1,329,717
3740f	2	MISSION SUPPORT OPERATIONS	74,077		74,077
3740f	3	DEPOT MAINTENANCE	410,893		410,893
3740f	4	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	53,056		53,056
3740f	5	BASE SUPPORT	264,425		264,425
		TOTAL, BA 01: OPERATING FORCES	2,132,168		2,132,168

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			
		<u>ADMINISTRATION AND SERVICEWIDE ACTIVITIES</u>			
3740f	6	ADMINISTRATION	60,270		60,270
3740f	7	RECRUITING AND ADVERTISING	14,516		14,516
3740f	8	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	25,485		25,485
3740f	9	OTHER PERSONNEL SUPPORT (DISABILITY COMP)	6,707		6,707
3740f	10	AUDIOVISUAL	644		644
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>107,622</b>		<b>107,622</b>
		Military Technicians Cost Avoidance		-85,000	-85,000
		<b>Total Operation and Maintenance, Air Force Reserve</b>	<b>2,239,790</b>	<b>-85,000</b>	<b>2,154,790</b>

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		Operation and Maintenance, Army National Guard			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>LAND FORCES</u>			
2065a	1	DIVISIONS	558,168		558,168
2065a	2	CORPS COMBAT FORCES	629,062		629,062
2065a	3	CORPS SUPPORT FORCES	333,393		333,393
2065a	4	ECHOLON ABOVE CORPS FORCES	615,838		615,838
2065a	5	LAND FORCES OPERATIONS SUPPORT	20,786		20,786
		<u>LAND FORCES READINESS</u>			
2065a	6	FORCE READINESS OPERATIONS SUPPORT	180,163	1,650	181,813
		Cannon bore cleaning		[[1,650]]	
2065a	7	LAND FORCES SYSTEMS READINESS	142,914		142,914
2065a	8	LAND FORCES DEPOT MAINTENANCE	230,567		230,567
		<u>LAND FORCES READINESS SUPPORT</u>			
2065a	9	BASE OPERATIONS SUPPORT	577,028		577,028
2065a	10	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	384,044		384,044
2065a	11	MANAGEMENT AND OPERATIONAL HQ	451,167		451,167

### Title III - Operation and Maintenance

(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
2065a	12	MISCELLANEOUS ACTIVITIES	59,356		59,356
		TOTAL, BA 01: OPERATING FORCES	4,182,486	1,650	4,184,136
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			
		<u>ADMINISTRATION AND SERVICEWIDE ACTIVITIES</u>			
2065a	13	ADMINISTRATION	110,669		110,669
2065a	14	SERVICEWIDE COMMUNICATIONS	26,341		26,341
2065a	15	MANPOWER MANAGEMENT	35,376		35,376
2065a	16	RECRUITING AND ADVERTISING	85,814		85,814
		TOTAL, BA 04: ADMINISTRATION & SERVICEWIDE ACTIVITIES	258,200		258,200
		CERFP		1,500	1,500
		Military Technicians Cost Avoidance		-227,400	-227,400
		WMD-CSTs		9,800	9,800
		CBRA		1,000	1,000
		Total Operation and Maintenance, Army National Guard	4,440,686	-213,450	4,227,236

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		Operation and Maintenance, Air National Guard			
		<u>BUDGET ACTIVITY 01: OPERATING FORCES</u>			
		<u>AIR OPERATIONS</u>			
3840f	1	AIRCRAFT OPERATIONS	2,685,471		2,685,471
3840f	2	MISSION SUPPORT OPERATIONS	362,114	2,000	364,114
		Extended cold weather clothing system		[2,000]	
3840f	3	DEPOT MAINTENANCE	676,647	78,800	755,447
		ANG depot maintenance (transfer from AF DPEM BA1, BA2)		[78,800]	
3840f	4	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	230,642		230,642
3840f	5	BASE SUPPORT	431,076		431,076
		<b>TOTAL, BA 01: OPERATING FORCES</b>	<b>4,385,950</b>	<b>80,800</b>	<b>4,466,750</b>
		<u>BUDGET ACTIVITY 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</u>			
		<u>SERVICEWIDE ACTIVITIES</u>			
3840f	6	ADMINISTRATION	27,490		27,490

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(Dollars in Thousands)

<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
3840f	7	RECRUITING AND ADVERTISING	9,398		9,398
		<b>TOTAL, BA 04: ADMINISTRATION &amp; SERVICEWIDE ACTIVITIES</b>	<b>36,888</b>		<b>36,888</b>
		Military Technicians Cost Avoidance CERFP		-137,300 400	-137,300 400
		<b>Total Operation and Maintenance, Air National Guard</b>	<b>4,422,838</b>	<b>-56,100</b>	<b>4,366,738</b>
		<b>TRANSFER ACCOUNTS</b>			
0810a	1	ENVIRONMENTAL RESTORATION, ARMY Fort Hood offsite conservation program Environmental Compliance --Holston Army Ammo Plant	400,948	4,650 [850] [3,800]	405,598
0810n	2	ENVIRONMENTAL RESTORATION, NAVY	266,820		266,820
0810f	3	ENVIRONMENTAL RESTORATION, AIR FORCE	397,368		397,368
0810d	4	ENVIRONMENTAL RESTORATION, DEFENSE-WIDE	23,684		23,684
0811d	5	ENVIRONMENTAL RESTORATION, FORMERLY USED DEFENSE	216,516	40,000	256,516
		<b>TOTAL, O&amp;M, TRANSFER ACCOUNTS</b>	<b>1,305,336</b>	<b>44,650</b>	<b>1,349,986</b>



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<u>Account</u>	<u>Line</u>	<u>Program Title</u>	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
		<u>MISCELLANEOUS APPROPRIATIONS</u>			
0104d	6	U.S. COURT OF APPEALS FOR THE ARMED FORCES	10,825		10,825
0838d	7	SUPPORT OF INTERNATIONAL SPORTING COMPETITIONS			
0118d	8	OVERSEAS CONTINGENCIES OPERATIONS TRANSFER FUND	30,000	-30,000	
		Eliminate OCOTF account		[-30,000]	
4965d	9	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	10	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	11	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	12	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	13	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	14	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	15	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	16	EMERGENCY RESPONSE FUND, DEFENSE			
0833d	17	EMERGENCY RESPONSE FUND, DEFENSE			
0141d	18	IRAQ FREEDOM FUND, DEF			
0819d	19	OVERSEAS HUMANITARIAN, DISASTER, AND CIVIC AFFAIRS	59,000		59,000
1236n	20	KAHOOLAWE			
0132d	21	CLAIMS, MT. PINATUBO, DEFENSE			
0134d	22	FORMER SOVIET UNION (FSU) THREAT REDUCTION	409,200		409,200
		<b>TOTAL, MISCELLANEOUS</b>	<b>509,025</b>	<b>-30,000</b>	<b>479,025</b>
		<b>TOTAL OPERATION AND MAINTENANCE TITLE:</b>	<b>121,874,589</b>	<b>-1,365,288</b>	<b>120,509,301</b>

**Subtitle A—Authorization of Appropriations****Subtitle B—Program Requirements, Restrictions, and Limitations****Commander's emergency response fund (sec. 311)**

The committee recommends a provision that would authorize the Secretary of Defense to use in fiscal year 2005 up to \$300.0 million from funds made available to the Department of Defense for operation and maintenance to fund the Commander's Emergency Response Program (CERP) and to fund a similar program to assist the people of Afghanistan. The CERP was established by the Administrator of the Coalition Provisional Authority for the purpose of enabling military commanders in Iraq to respond to urgent humanitarian relief and reconstruction requirements within their areas of responsibility by carrying out programs that will immediately assist the Iraqi people. The provision would require the Secretary to provide quarterly reports to the congressional defense committees regarding the use of funds made available pursuant to this authority. The committee expects the quarterly reports to include detailed information regarding the amount of funds spent, the recipients of the funds, and the specific purposes for which the funds were used. The committee directs that funds made available pursuant to this authority be used in a manner consistent with the guidance on the use of CERP funds that the Under Secretary of Defense (Comptroller) issued to the Commander in Chief, U.S. Central Command and the Secretary of the Army in a memorandum dated November 25, 2003.

**Limitation on transfers out of working capital funds (sec. 312)**

The committee recommends a provision that would limit the transfer of funds out of, or among, working capital funds. The provision requires the Secretary of Defense to notify the Congress when such transfers are made. The Department of Defense should submit prior approval reprogramming requests, DD Forms 1415-1, to the congressional defense committees in accordance with established procedures. The committee also expects the budget justification materials submitted annually to reflect any such transfers made in the prior fiscal year.

The committee is concerned about the increasing practice of transfers of funds out of working capital funds using authorities under Section 8006 of the Department of Defense Appropriations Act for Fiscal Year 2004 (Public Law 108-87). In December 2003, the Department transferred \$163.1 million in working capital funds from the services to the Defense Commissary Agency Working Capital Fund without notifying the Congress. In a letter of notification dated April 5, 2004, the Department transferred \$1.1 billion from the Transportation Working Capital Fund to the Operation and Maintenance accounts of the Army and the Navy. Over the past four years, the committee understands these types of transfers out of, and among, working capital funds had occurred less than once a year.

The committee is concerned that the practice of transferring funds out of, or among, working capital funds undermines some of the basic principles and benefits of a working capital fund. A working capital fund is intended to promote cost consciousness, mirror private sector operations, create buyer-seller relationships, allow decision makers to know the cost of their decisions, and provide considerable flexibility. However, using one fund to supplement another may create adverse incentives, and lead to inefficient management decisions. Although flexibility is intended to be applied to the operations and funding, for which a certain working capital fund is established, that flexibility is not intended to extend beyond the working capital fund. Finally, the committee is concerned that movements of funds out of, or among, working capital funds diminishes the ability of Congress to conduct adequate oversight.

### **Subtitle C—Environmental Provisions**

#### **Payment of certain private cleanup costs in connection with defense environmental restoration program (sec. 321)**

The committee recommends a provision which would allow the Secretary of Defense to execute environmental restoration agreements with owners of covenant properties. Under section 120(h) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, the United States is required to provide a deed covenant guaranteeing it will perform remediation of contamination discovered after a property transfer. Therefore, the Department of Defense has permanent, irrevocable liability for cleanup of any contamination on former Department property. However, there is no current authority for the Department to pay a land owner its costs for undertaking remedial action itself.

Currently, when an owner discovers contamination on their covenant property, they must notify the service from which they purchased the covenant property. The services then respond to each covenant property in order of risk and health based prioritization. This leaves many landowners without a quick remedy and the potential burden and cost of pursuing a remedy in court. The owner may be forced to choose this latter approach if they have already cleaned up the covenant property, and they are seeking to be reimbursed. This approach can also be more expensive to the U.S. taxpayers, since the covenant property owner may cleanup the site to standards beyond what is necessary or appropriate.

The committee recognizes that potential land purchasers, such as developers, are becoming increasingly apprehensive about purchasing former Department property. This may threaten the successful transfer of the Department's inventory after the 2005 BRAC round. This provision would allow the Department to enter into agreements with the owners of covenant property. The covenant property owner can accept the agreement or not, at its discretion. The agreement would set out the process the landowner would follow if contamination is later found on the covenant property. The agreement would resolve such issues as: notice to the Federal Government, time limits to reply, cleanup standards to be used, and the reimbursement process.

**Reimbursement to the Environmental Protection Agency for certain costs in connection with the Moses Lake, Washington Superfund Site (sec. 322)**

The committee recommends a provision that would provide discretionary authority to the Secretary of Defense to transfer not more than \$524,927 to the Moses Lake Wellfield Superfund Site (Moses Lake), 10-6J Special Account, formerly the home of Larson Air Force Base. This payment would be for reimbursement to the U.S. Environmental Protection Agency (EPA) for costs and interest incurred to perform a remedial investigation and feasibility study at Moses Lake, where the groundwater is apparently contaminated with trichloroethylene.

**Satisfaction of certain audit requirements by the Inspector General of the Department of Defense (sec. 323)**

The committee recommends a provision that would allow the Department of Defense Inspector General (IG) the discretion to audit Superfund financial transactions on a periodic basis. The committee notes that the recent IG annual audits have concluded that the Corps of Engineers has properly administered its portion of the Superfund and that management controls over Superfund monies, for which the Department is responsible, are adequate. The committee intends that by complying with this provision, the Department IG will be in compliance with the requirements of section 111(k) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (Public Law 96-510).

**Comptroller General study and report on drinking water contamination and related health effects at Camp Lejeune, North Carolina (sec. 324)**

The committee recommends a provision that would require the Comptroller General of the U.S. to conduct a study of the history of drinking water contamination at the United States Marine Corps (USMC) base at Camp Lejeune, North Carolina. As part of this study, the Comptroller General shall determine the following: (1) what type of contamination has been found in the drinking water; (2) the source of that contamination and when it may have begun; (3) when USMC officials first became aware of the contamination; (4) what steps were taken to address the contamination; (5) how appropriate those steps were given the state of knowledge concerning such contamination and relevant legal requirements in existence at the time; and (6) any other factors that the Comptroller General shall deem relevant and appropriate to this issue.

Additionally, the Comptroller General shall review the plan developed by the Agency for Toxic Substances and Disease Registry (ATSDR) to study the possible health effects associated with drinking of contaminated water at Camp Lejeune, and assess the effectiveness of the plan, including whether the ATSDR study does the following: (1) addresses the appropriate at-risk populations; (2) encompasses an appropriate time frame; (3) considers all relevant health effects; (4) assesses whether completion can be expedited without compromising its quality; and (5) any other factors that the Comptroller General shall deem relevant and appropriate to this issue.

The Comptroller General may use independent, highly qualified, and knowledgeable persons to assist in this study. The Comptroller General shall ensure that interested parties, including marines and their families who lived or worked at Camp Lejeune during the period of time when the drinking water may have been contaminated, have the opportunity to submit information and views on the matters being studied.

The provision requires that by no later than one year from the date of enactment of this Act, the Comptroller General shall submit a report on the results of this study to the congressional defense committees, including any recommendations for further action or any necessary legislative actions.

The committee notes that some marines and their families had been exposed to contaminated drinking water at Camp Lejeune, possibly dating back several decades and as recently as 1985. Many have experienced severe adverse health effects. Affected families believe that their tragedies may have been caused by the water contamination at Camp Lejeune. Although scientific evidence has not yet linked specific adverse health effects to the exposure of the contaminants in the drinking water at Camp Lejeune, these families have long been seeking an independent review to help resolve this matter.

The committee is making no conclusions by recommending this study, but rather believes that a comprehensive, independent investigation of this matter is required. The committee is sensitive to the concerns of marines and their families who have been waiting for a resolution for a very long time and is confident that the results of this report will be very helpful in expediting this issue.

**Increase in authorized amount of environmental remediation, Front Royal, Virginia (sec. 325)**

The committee recommends a provision that would amend section 591(a)(2) of the Water Resources Development Act of 1999 (Public Law 106–53) by increasing the authorized level by \$10.0 million for environmental remediation in Front Royal, Virginia. The committee notes that the contamination at this site was originally derived from defense manufacturing of rayon used to make parachutes and jump suits dating back to World War II. Half of the federal funds provided for this cleanup have been defense funds, including \$5.0 million in formerly used defense sites (FUDS).

**Subtitle D—Depot-Level Maintenance and Repair**

**Simplification of annual reporting requirements concerning funds expended for depot maintenance and repair workloads (sec. 331)**

The committee recommends a provision that would simplify and improve the two separate annual reports required by section 2466(d) of title 10, United States Code, that the Department of Defense prepares relating to the percentage of funds expended or projected to be expended for depot maintenance and repair workloads in the public and private sectors. One report is due February 1 and covers the two previous years. The other report is due April 1 and covers the next five years. This provision implements the General

Accounting Office recommendation to improve these reports by only requiring reporting on the previous and current, budget years because that data is more reliable and any potential impacts are more immediate.

**Repeal of requirement for annual report on management of depot employees (sec. 332)**

The committee recommends a provision that would repeal a reporting requirement by the Department of Defense to report to the Committees on Armed Services of the Senate and the House of Representatives, not later than December 1 of each year, on the number of employees employed and expected to be employed by the Department during that fiscal year to perform depot-level maintenance and repair of materiel. The committee, after consulting with the General Accounting Office, agrees with the Department that this reporting requirement is no longer needed.

**Extension of special treatment for certain expenditures incurred in the operation of centers of industrial and technical excellence (sec. 333)**

The committee recommends a provision that would extend for three years and expand the applicability of section 2474(f) of title 10, United States Code. Section 2474(f) excludes all work performed by non-Federal personnel at designated Centers of Industrial and Technical Excellence from the 50 percent limitation on contracting for depot maintenance in section 2466(a) of title 10, United States Code, if the personnel performing the work are pursuant to a public-private partnership. Extending this provision should allow the Department of Defense to continue to partner with private industry at Centers of Industrial and Technical Excellence to achieve improved maintenance capabilities for weapons systems support.

**Subtitle E—Extension of Program Authorities**

**Two year extension of Department of Defense telecommunications benefit (sec. 341)**

The committee recommends a provision that would extend for two years the Department of Defense telecommunications benefit contained in section 344 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136). The committee is concerned with the Department's implementation of this benefit. Congressional delegations visiting locations in the theater of operations have learned that affordable telephone calling cards and telephone equipment are often not readily available to military personnel. The committee directs the Secretary of Defense to report, not later than April 1, 2005, on all actions taken to implement the Department's telecommunications benefits, including current utilization rates, efforts to inform military personnel of the availability of such benefits, and recommendations for further improvement of the Department's telecommunications benefits.

**Two year extension of Arsenal Support Program Initiative  
(sec. 342)**

The committee recommends a provision that would extend the Arsenal Support Program Initiative from fiscal year 2004 through the end of fiscal year 2006. The Arsenal Support Program Initiative is a demonstration project at Army manufacturing arsenals to allow these facilities to reduce overhead costs by making available surplus capacity to the private sector.

**Reauthorization of warranty claims recovery pilot program  
(sec. 343)**

The committee recommends a provision that would extend the warranty claims pilot program through September 30, 2006. The committee is still concerned that the Department of Defense is not receiving the appropriate refunds owed to it by original equipment manufacturers for maintenance work performed in public depots on systems under warranty. Therefore, the committee continues to support the pilot program to recover any refunds owed to the Air Force for maintenance work performed in public depots on aircraft engines while under warranty. Receipts under this program would be returned to the appropriations account from which the maintenance work was funded.

**Subtitle F—Defense Dependents Education**

**Assistance to local educational agencies that benefit dependents of members of the Armed Forces and Department of Defense civilian employees (sec. 351)**

The committee recommends a provision that would authorize \$30.0 million in Operation and Maintenance, Defense-wide activities, for continuation of the Department of Defense's assistance program to local educational agencies that benefit dependents of service members and Department civilian employees.

**Impact aid for children with severe disabilities (sec. 352)**

The committee recommends a provision that would authorize \$5.0 million in Operation and Maintenance, Defense-wide, for impact aid payments for children with disabilities under section 8003(d) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 7703(d)), using the formula set forth in section 363 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001 (Public Law 106-398), for continuation of the Department of Defense's assistance program to local educational agencies that benefit dependents with severe disabilities.

**Subtitle G—Other Matters**

**Charges for Defense Logistics Information Services material  
(sec. 361)**

The committee recommends a provision that would permit the Defense Logistics Information Services (DLIS), a division of the Defense Logistics Agency, to develop a fee schedule for charging public and private entities for copies of materials from the Federal Logistics Information System (FLIS). The FLIS is a management sys-

tem designed to collect, store, process, and provide item-related logistics information. This information often is used by private entities doing or seeking business with the Department of Defense.

Since 1994, and in an effort to recover full costs, the DLIS has charged subscription fees for information dissemination products, such as compact discs. This is in accord with the Office of Management and Budget Circular A-130, Management of Federal Information Resources, and Revised Transmittal Memorandum No. 4, 2000, which permits agencies to set user charges for information dissemination at a level sufficient to recover costs. Notwithstanding this system, the DLIS information currently may be obtained at a cheaper rate through a request under the Freedom of Information Act (FOIA) (5 U.S.C. 552). The FOIA, however, provides that its provisions do not supercede fees chargeable under a statute specifically permitting the establishment of a level of fees for particular types of records. This section would permit FLIS material to fall within this FOIA exception.

**Temporary authority for contractor performance of security-guard functions (sec. 362)**

The committee recommends a provision that would extend for two years the authority granted in section 332 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 to hire contract security guards on a temporary basis to fill positions that would otherwise be filled by members of the Armed Forces.

The committee is disappointed that the Department of Defense has yet to submit a report on the Department's long-term plans for meeting its increased security guard needs after September 11, 2001, as required by section 332. This report was due in May 2003. Accordingly, the extended authority would be contingent upon the submission of the required report.

In addition, the committee notes that the material submitted by the Department in support of its legislative proposal on security guards includes the statement that: "Meeting these increases through expanding either civilian or active military workforce is difficult because the end strength of both workforces is constrained and there are many other demands for these personnel." Section 129 of title 10, United States Code, prohibits the use of any constraint or limitation on the number of employees in the Department. Section 129(f) requires the Secretary of each military department and the head of each defense agency to certify compliance with this provision on an annual basis. For this reason, the provision recommended by the committee would amend the reporting requirement in section 332 to require that the report specifically identify any limitation or constraint on the end strength of the Department's civilian workforce that makes it difficult to meet security guard requirements by hiring civilian employees.

**Pilot program for purchase of certain municipal services for Department of Defense installation (sec. 363)**

The committee recommends a provision that would authorize a pilot program under which the secretary of a military department could provide for the purchase of local governmental services at a Department of Defense installation from the local government re-



sponsible for serving the area. This pilot program is a follow-on to the program authorized in section 816 of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337) under which the Secretary of Defense was authorized to engage in similar support agreements for the Presidio of Monterey. Unlike the Monterrey pilot program, the provision recommended by the committee would not authorize the acquisition of security guard and firefighting services from local government entities. The pilot program would provide an opportunity for the military departments to partner with local governments at six installations with a goal of providing quality services at a reduced cost to the Department.

### **Additional Matters of Interest**

#### **Army**

##### **Forward osmosis water filtration system**

The budget request included \$1.2 billion in Operation and Maintenance, Army (OMA), for support to land forces operations. The committee notes that there is a continuing need at austere locations to filter contaminated water to high purity levels for emergency use by the men and women in the military. Therefore, the committee recommends an increase of \$1.0 million in OMA for a forward osmosis water filtration system.

##### **Rapid Fielding Initiative**

The budget request included \$57.2 million in Operation and Maintenance, Army (OMA), for individual clothing and equipment issued as part of the Army's Rapid Fielding Initiative (RFI). The committee notes that RFI-procured clothing and equipment significantly enhances the mobility and survivability of individual soldiers. According to the Department of the Army, these items, such as the Advanced Combat Helmet, provide the most up-to-date force protection and soldier mission essential equipment. Another notable element of the RFI program is fleece garments such as overalls and jackets. These items provide increased protection and comfort in areas with extremely cold temperatures such as Afghanistan, and have received very favorable reviews from our troops in the field. The Department of the Army has identified these and other clothing and equipment items as an unfunded requirement. Therefore, the committee recommends an increase of \$262.0 million in OMA for RFI individual clothing and equipment.

The committee notes that this additional funding is part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

##### **Interceptor Body Armor**

The budget request included \$40.0 million in Operation and Maintenance, Army (OMA), \$19.3 million in Operation and Maintenance, Marine Corps (OMMC), and \$4.9 million in Operation and Maintenance, Marine Corps Reserve (OMMCR), for Interceptor Body Armor (IBA). An IBA is composed of an Outer Tactical Vest (OTV) and a Small Arms Protective Insert (SAPI) plate. According

to Army and Marine Corps officials, the utility of the IBA is one of the most important lessons learned from Operation Iraqi Freedom. The IBA has significantly increased the survivability of the individual soldier and Marine in combat and contingency operations. The committee notes that the Army unfunded requirement for IBAs is \$295.0 million and the Marine Corps unfunded requirement is \$16.6 million. Therefore, the committee recommends an increase of \$295.0 million in OMA, \$14.4 million in OMMC, and \$2.2 million in OMMCR for IBA.

The committee notes that this additional funding is one part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

### **Corrosion prevention and control**

The budget request included \$537.5 in Operation and Maintenance, Army (OMA), for land forces systems readiness and \$367.3 in Operation and Maintenance, Marine Corps (OMMC) for field logistics support. The committee notes the continuing requirement of the Army and the Marine Corps to mitigate the impact of corrosion on military vehicles and other equipment. The Army, for example, has established Corrosion Service Centers at Fort Hood, Texas and Schofield Barracks, Hawaii. The Marine Corps increased funding for corrosion mitigation efforts by \$2.2 million for similar initiatives. The committee continues to support the efforts of both services to address corrosion in their vehicles and other equipment. Therefore, the committee recommends an increase of \$8.0 million in OMA and \$4.0 million in OMMC to support corrosion prevention and control programs.

### **M1A1 transmission maintenance**

The budget request included \$1.0 billion in Operation and Maintenance, Army (OMA), for land forces depot maintenance. In the Senate report to accompany S. 1050 (S. Rpt. 108-46), the committee noted interest in the implications of M1A1 transmission maintenance on the readiness of the M1A1 tank fleet. The committee notes the intent of the Army's current plan is to sustain tank transmission readiness by procuring a common parts kit for transmissions overhauled at organic depot facilities. Therefore, the committee recommends an increase of \$21.9 million in OMA for common parts kits in conjunction with M1A1 transmission maintenance.

### **Specialty containers**

The budget request included \$327.3 million in Operation and Maintenance, Army (OMA), for strategic mobilization. The committee notes the particularly critical role of quadruple specialty containers (Quadcons) in supporting delivery of Army equipment and material worldwide. With only approximately 10 percent of the military requirement for Quadcons resourced, strategic mobility is constrained. Therefore, the committee recommends an increase of \$4.0 million in OMA for Quadcons.

### **Department of Defense foreign language training**

The budget request included \$2.1 million for the Defense Language Institute in Operation and Maintenance, Army (OMA), Budget Activity (BA) 03, specifically for Satellite Communications Language training activities (SCOLA).

SCOLA is a unique satellite-based language training activity that provides television programming in a variety of languages from around the world. Language students and seasoned linguists have found this augmentation to their normal language training to be helpful. SCOLA has also developed an Internet-based streaming video capability that greatly increases the availability of this training medium to military linguists, virtually anywhere they can obtain an Internet connection. In addition, SCOLA is developing a digital archive that will allow users anywhere to review and sort language training information, on demand. The development of these capabilities will make SCOLA training assistance much more widely available, but requires additional investment.

The committee recommends an increase of \$5.6 million in OMA, BA 03 for SCOLA, to improve the availability of SCOLA language assistance to all Department of Defense language training activities.

### **Management training**

The budget request included \$490.3 million in Operation and Maintenance, Army (OMA), for central supply activities. The committee notes the commitment of the Army Material Command to adopt proven commercial process improvement techniques to streamline and improve efficiencies in a variety of areas, including acquisition life cycle management. Therefore, the committee recommends an increase of \$1.0 million in OMA for Lean/Six Sigma professional development training at Army Material Command.

### **Radio frequency identification**

The budget request included \$16.2 million in Operation and Maintenance, Army (OMA), \$13.2 million in Other Procurement, Army (OPA), \$4.7 million in Operation and Maintenance, Air Force (OMAF), and \$1.8 million in Operation and Maintenance, Navy (OMN), for radio frequency identification (RFID) programs. The committee notes that RFID programs are improving the effectiveness and efficiency of logistics operations. Each of the services and the Defense Logistics Agency has identified funding shortfalls for RFID in the budget requests. Therefore, the committee recommends an increase of \$34.0 million for RFID programs as follows: \$1.4 million in OMA; \$6.8 million in OPA; \$3.0 million in OMAF; \$6.5 million in Other Procurement, Navy; \$8.0 million in Operation and Maintenance, Defense-wide; and \$8.3 million in Procurement, Marine Corps.

The committee understands that one of the important lessons learned from Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) is the necessity to fully account for equipment and material, either in inventory or en route to the men and women in the field or at-sea. To enhance this capability, which is referred to as “total asset visibility” and “in-transit visibility,” the Defense Department and the services incorporated RFID into OIF

and OEF logistics operations. The Defense Logistics Agency, for example, currently uses RFID on all container and pallet deliveries to the U.S. Central Command (CENTCOM).

Results of RFID implementation in support of contingency operations have been positive. The Deputy Chief of Staff of the Army (G4) for logistics testified that RFID was very well utilized for the strategic movement into Kuwait. The rapid flow of material into theater would not have been possible without the level of asset visibility that was achieved. In addition, RFID programs, according to Department officials, have resulted in at least \$300 million in savings as a result of increased asset visibility.

The committee recognizes the requirements for increasing RFID integration at the tactical level of ongoing contingency operations in CENTCOM and beyond the CENTCOM area of responsibility (AOR) to other combatant commanders. The Marine Corps, for example, is incorporating RFID on all sustainment cargo shipments during the current deployment to Iraq and is establishing key nodes in theater to employ RFID visibility at the tactical level. In testimony before the Committee on Armed Services of the Senate on April 1, 2004, the Commander, U.S. Pacific Command (PACOM) testified that “every effort should be made to fund and train personnel to activate [RFID] capability” for total asset visibility in the PACOM AOR. Finally, RFID pilot programs have demonstrated utility in support of the Commander, U.S. Northern Command homeland defense preparedness, such as rapidly identifying, locating, and distributing chemical-biological defense personal protective gear or tracking high-value munitions in production and storage.

The committee is interested in the Department’s efforts to further incorporate RFID into the logistics operations of the services and combat support agencies, as well as additional lessons learned from RFID use. The committee directs the Undersecretary of Defense for Acquisition, Technology, and Logistics to provide periodic updates to the congressional defense committees on RFID programs.

#### **Civilian personnel pay in excess of requirements**

Based on analysis of the services’ end strength data for civilian personnel as of January 31, 2004, the General Accounting Office (GAO) projects that the services’ civilian personnel costs are overstated for fiscal year 2005 by \$130.3 million. Therefore, the committee recommends reducing the operation and maintenance accounts by \$130.3 million according to GAO’s estimates by service, as follows:

- Army—\$81.9 million;
- Air Force—\$36.6 million; and
- Navy/Marine Corps—\$11.8 million.

#### **Working capital funds**

The budget request included \$1.7 billion in discretionary spending for defense working capital funds. These working capital funds serve a vital role in providing financial transaction flexibility for critical defense customer support activities. When working capital funds produce an annual net operating result involving a surplus—revenues exceeding expenses, consideration should be given to ad-

justing customer rates in future years. Working capital funds that do not appropriately return surplus funds to the supported departments, commands, and agencies, through rate-change mechanisms, artificially inflate the cost of support and deprive the supported units of limited resources. However, the Global War on Terrorism, in many cases, has created increased work flow in and out of working capital funds annually by 50 percent over scheduled peacetime projections. Consequently, end of year positive operating balances and excess cash balances continue to grow for most working capital funds.

The services current projections of net operating result for fiscal year 2005 are based, in part, on artificially low revenue estimates. As higher revenues are realized, the working capital funds will continue to maintain large, positive operating balances and excess cash balances. To ensure proper management of the funds, the committee recommends reducing excess balances within the services' accounts by \$810.0 million, as follows: Army, \$250.0 million; Navy, \$200.0 million; and Air Force, \$360.0 million; and within the defense-wide accounts by \$60.7 million.

#### **Army excess carryover**

The committee is concerned with the backlog of depot workload, or carryover, due to the Global War on Terrorism within the Army Working Capital Fund. Due to the extension of the Army tour-of-duty for Operation Iraqi Freedom and the retention of equipment overseas, certain depot workload has not materialized, and will carry over into fiscal year 2005. The committee is concerned that funding additional new workload above and beyond the work already scheduled will generate backlogs that will not be able to be executed in fiscal year 2005. Therefore, the committee recommends a decrease of \$100.0 million in Operation and Maintenance, Army, to reflect funds in the Army Working Capital Fund that cannot be expended in fiscal year 2005.

#### **Weapons of Mass Destruction—Civil Support Teams**

The National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) directed the Department of Defense to provide funding for 11 Weapons of Mass Destruction–Civil Support Teams (WMD–CSTs). The budget request included \$27.2 million to establish only four additional WMD–CSTs in fiscal year 2005. The committee recommends an increase of \$46.9 million to establish the remaining seven teams in fiscal year 2005. The committee directs that the \$46.9 million be allocated as follows: National Guard Personnel, Army, \$12.6 million; National Guard Personnel, Air Force, \$2.1 million; Operations and Maintenance, Army National Guard, \$9.8 million; Operations and Maintenance, Army, \$4.2 million; and Procurement, Defense-wide, Chemical Biological Defense Program, \$18.2 million.

Currently, 32 WMD–CSTs are certified and operational. Section 1403 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Public Law 107–314) directed the Secretary of Defense to establish a total of 55 teams, and to ensure that there is at least one team located in each State and Territory. The addi-

tional funding recommended by the committee will provide the remaining funding required to establish all 55 teams.

### **Navy**

#### **NULKA decoy cartridge**

The budget request included \$622.1 million in Operation and Maintenance, Navy (OMN), for ship operational support and training. The committee notes that the Navy has begun submitting NULKA (Mk 234 electronic decoy cartridge) rounds to Navy maintenance activities for three-year re-certification, maintenance, and repair of components and subassemblies. The committee recommends an increase of \$2.0 million in OMN for NULKA re-certification processes to expedite the return of this equipment to the fleet.

#### **Navy depot maintenance**

The budget request included \$3.9 billion in Operation and Maintenance, Navy (OMN), for the ship depot maintenance program. The committee notes that the Chief of Naval Operations (CNO) has identified a \$76.0 million funding shortfall in the ship depot maintenance program for fiscal year 2005 as an unfunded priority. Specifically, the unfunded requirement for fiscal year 2005 includes maintenance on the USS George Washington (CVN 73), the USS Minneapolis-St. Paul (SSN 708), and the USS Hyman G. Rickover (SSN 709). The committee supports the initiative of the CNO to address these unfunded requirements. The committee, therefore, recommends an increase of \$70.0 million in OMN for ship depot maintenance to support labor requirements for maintenance of the USS George Washington, the USS Minneapolis-St. Paul, and the USS Hyman G. Rickover.

#### **Manufacturing Technical Assistance and Production Program**

The budget request included \$379.9 million in Operation and Maintenance, Navy (OMN), for combat communications, including funding for Space and Naval Warfare Systems Command (SPAWAR) activities. The committee notes that, under the management of SPAWAR, the Manufacturing Technical Assistance and Production Program (MTAPP) has served as a key program for prime contractors to solicit requirements and for small businesses to integrate into the military supply chain. The committee, therefore, recommends an increase of \$1.0 million in OMN for SPAWAR MTAPP.

#### **Appropriated funds for military morale, welfare and recreation programs**

The budget included \$333.6 million in the Operations and Maintenance, Navy (OMN), for morale, welfare and recreation programs, \$54.2 million less than the amount provided for fiscal year 2004. The committee is concerned that this reduction would significantly impact programs that are vital to military personnel and their families, such as hours of operation for child care centers, libraries, and fitness and recreation centers. Such decreases could also nega-

tively impact retention of military personnel. Accordingly, the committee recommends an increase of \$52.4 million (OMN) in morale, welfare and recreation funding. These programs are critically important to military members and their families, including families of members of the Guard and Reserve. The committee directs the Secretary of Defense to submit a report by June 1, 2005, identifying programs and amounts spent for morale, welfare and recreation by all services in fiscal years 2004 and 2005.

### **Marine Corps**

#### **General property and support equipment**

The budget request included no funding in Operation and Maintenance, Marine Corps (OMMC), or Operation and Maintenance, Marine Corps Reserve (OMMCR), for general property and support equipment. The committee notes that after-action reports from Marine Corps units deployed to Operation Iraqi Freedom and Operation Enduring Freedom have identified a number of items which enhance individual marine readiness, such as: sun, wind, and dust goggles; mosquito netting; ponchos; field tarps; and water purification systems. The Commandant of the Marine Corps has identified an unfunded requirement for general property and support equipment of \$12.0 million. Therefore, the committee recommends an increase of \$9.0 million in OMMC and \$3.0 million in OMMCR for general property and support equipment.

The committee notes that this additional funding is one part of an overall initiative to provide individual service members increased personal protection and combat equipment.

#### **All-purpose environmental clothing system**

The budget request included no funding in Operation and Maintenance, Marine Corps (OMMC), or Operation and Maintenance, Marine Corps Reserve (OMMCR), for the all-purpose environmental clothing system (APECS). The committee notes that the APECS is a component of the family of mountain cold weather clothing and equipment. The Commandant of the Marine Corps has identified an unfunded requirement for APECS of \$5.4 million. Therefore, the committee recommends an increase of \$4.8 million in OMMC and \$600,000 in OMMCR for APECS.

The committee notes that this additional funding is one part of an overall initiative to provide individual service members increased personal protection and combat equipment.

#### **Ultra-lightweight camouflage net system**

The budget request included no funding in Operation and Maintenance, Marine Corps (OMMC), or Operation and Maintenance, Marine Corps Reserve (OMMCR), for the ultra-lightweight camouflage net system (ULCANS). According to the Marine Corps, ULCANS is of high military value because the system increases survivability by providing reduced probability of detection. The Commandant of the Marine Corps has identified an unfunded requirement for ULCANS of \$12.2 million. Therefore, the committee recommends an increase of \$9.2 million in OMMC and \$3.0 million in OMMCR for ULCANS.

The committee notes that this additional funding is one part of an overall initiative by the committee to provide individual service members increased personal force protection and combat equipment.

#### **Supplemental communications and electrical utility support to USMC NOC**

The budget request included no funding in Operation and Maintenance, Marine Corps, to extend and improve base information technology and electric infrastructure to meet requirements of the network operations center currently under construction and other facilities at the United States Marine Corps Base at Quantico, Virginia. Without additional funding for the Marine Corps network operations center, the Marine Corps communications and warfighting capabilities will be degraded. Therefore, the committee recommends an increase of \$9.2 million to extend and improve base information technology and electric infrastructure to meet requirements of the network operations center and other facilities.

### **Air Force**

#### **Air Force depot maintenance**

The budget request included \$2.6 billion in Operation and Maintenance, Air Force (OMAF), for the Air Force depot maintenance program. The committee notes that this is a five percent increase in funding for Air Force depot maintenance for fiscal year 2005.

In a letter to the committee, dated March 26, 2004, Air Force officials identified the necessity to transfer \$78.8 million from the Air Force depot maintenance program to the Air National Guard depot maintenance program. The purpose of the transfer is to ensure funding for critical Air National Guard depot maintenance requirements in fiscal year 2005. Without the transfer, a number of aircraft will be grounded, thereby impacting the ability of the Air National Guard to sufficiently support Operation Noble Eagle. Further, this transfer will result in the funding of 96 percent of the depot maintenance requirements of the Air National Guard. Therefore, the committee recommends a transfer of \$39.3 million from OMAF, budget activity one to Operation and Maintenance, Air National Guard (OMANG), budget activity one and a transfer of \$39.5 million from OMAF, budget activity two, to OMANG, budget activity one.

The committee is concerned, however, that this transfer requested by the Air Force could exacerbate problems in other Air Force depot maintenance programs. The committee notes, for example, that almost 50 percent of the depot maintenance unfunded requirements identified by the Air Force is for KC-135 airframe and engine maintenance. The committee is particularly concerned about the degree to which the transfer and unfunded requirement shortfall could jeopardize ongoing Air Force efforts to implement corrosion mitigation efforts in the KC-135 maintenance program. For these reasons, the committee recommends an increase of \$60.0 million in OMAF for KC-135 depot maintenance.



### **Drop zone extension**

The committee recommends an increase of \$600,000 to the Operation and Maintenance account for Air Force operating forces to extend the Sooner drop zone used for C-17 flight training at Altus Air Force Base, Oklahoma.

### **Oxygen repair facility upgrades**

The budget request included \$410.7 million in Operation and Maintenance, Air Force (OMAF), for depot maintenance, including oxygen repair facilities at depot activities. Oxygen repair facilities support maintenance of a variety of Air Force aviation systems, including liquid oxygen converters, B-1B aircraft molecular sieve oxygen generation systems, and F-15 aircraft on-board oxygen generation systems (OBOGS). The committee notes the requirement for updating oxygen repair facilities in preparation for F-16 OBOGS and F-22 oxygen systems. Therefore, the committee recommends an increase of \$600,000 in OMAF for oxygen repair facility upgrades.

### **Homeland Security/Homeland Defense Education Consortium**

The budget request did not include funds in Operation and Maintenance, Air Force (OMAF), to continue U.S. Northern Command's (NORTHCOM) homeland security-homeland defense education consortium. The committee recommends an increase of \$1.0 million in OMAF to enable NORTHCOM to expand this consortium in order to establish ties between NORTHCOM and the educational community for research support and to provide people with expertise relevant to homeland security and homeland defense.

The Homeland Security/Defense Education Consortium is an integrated network of military, federal, and civilian institutions dedicated to improving NORTHCOM's capabilities to protect and defend our nation. The consortium will promote the development of homeland security/defense programs to meet the needs of agencies with responsibilities for homeland security/defense, the needs of the academic community interested in supporting homeland security/defense needs, and the needs of homeland security/defense professionals interested in pursuing higher education in homeland security/defense-related areas. The consortium will work to focus and facilitate research deemed critical to understanding the entire spectrum of homeland security/defense operations, roles, responsibilities, and development.

### **Simulation training for Department of Defense weapons of mass destruction and civilian emergency response system**

The budget request included \$1.2 million to support the Air Force Weapons of Mass Destruction Emergency Response program (WMD ER), which sustains training and exercises at a limited number of Air Force installations. The committee recommends an increase of \$2.5 million to expand and enhance the WMD ER program.

The committee notes that the ability to respond rapidly and effectively to a WMD event will require a close working relationship

between military and civilian responders. This initiative will provide simulation training for Department of Defense personnel to better orient them to civilian emergency response organizations and procedures in accordance with the National Response Plan and the National Incident Management System, and to acquaint them with the health, legal, and public safety issues unique to the civilian environment.

### **Transportation Working Capital Fund**

The U.S. Transportation Command charges the military services for transporting goods and personnel through a working capital fund arrangement where customers are billed for services to cover costs. Customer rates are normally adjusted a year in advance—including surcharges for administration and overhead costs—with the goal of achieving a zero operating balance.

Since September 11, 2001, the Global War on Terrorism has placed high demands on the Department's transportation system, resulting in large positive operating balances in the Transportation Working Capital Fund (TWCF). In fiscal year 2003, the excess balances in the TWCF were \$1.6 billion. On April 5, 2004, the Department notified the Congress of its intent to transfer \$1.1 billion from the TWCF to the Army's and Navy's operation and maintenance accounts. However, ongoing operations in support of the Global War on Terrorism are still projected to result in large positive operating balances in the TWCF for fiscal year 2004. Therefore, the committee recommends reducing excess balances in the TWCF by \$640.0 million.

## **Defense-wide**

### **Joint Chiefs of Staff Exercise Program**

The budget request included \$243.1 million for Operation and Maintenance, Defense-wide (OMDW), Budget Activity (BA) 1, Operating Forces, for the Joint Chiefs of Staff (JCS). Included in this amount is \$177.0 million for the JCS Exercise Program, an increase of \$11.8 million over the amount that will be utilized in fiscal year 2004. The Congress authorized and appropriated \$331.8 million in fiscal year 2004, but due to a reduced exercise schedule and lower than expected transportation costs, the Department of Defense currently projects that \$165.2 million will actually be spent.

The JCS Exercise Program is an important activity that ensures the ability of the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, and the Combatant Commanders to effectively command and control U.S. Armed Forces around the world and ensures that senior U.S. military commanders and their staffs are fully familiar with potential contingencies.

The ability to conduct planned exercises each year is complicated by actual, ongoing military operations. These actual military operations do partially obviate the need for planned training exercises, as senior military commanders and planning staffs plan, conduct, and control complex military operations. In the past two years, the full JCS exercise schedule has not been conducted because of competing military requirements, resulting in programmed funding

being reprogrammed to higher priority requirements. Current military deployments and ongoing military operations in fiscal year 2005 will almost certainly result in JCS exercises at a level lower than planned.

The committee recommends a decrease of \$11.8 million for OMDW, BA 1, for the JCS Exercise Program. The remaining \$165.2 million authorized for JCS exercises will allow this program to proceed at the same level as planned for fiscal year 2004.

#### **Unconventional Nuclear Warfare Defense Program**

The budget request included no funding in Operation and Maintenance, Defense-wide (OMDW), for continued operation of the Unconventional Nuclear Warfare Defense (UNWD) Program. The committee recommends additional funding of \$2.5 million in OMDW, for UNWD test bed infrastructure support.

The committee notes that UNWD systems are designed to detect and give early warning of an unconventional nuclear warfare attack using radiological dispersion devices or improvised nuclear devices (so-called "dirty bombs"). The UNWD system networks connect to the existing emergency response systems at host installations, giving installations increased early warning and standoff distance and improved potential to prevent a successful attack.

#### **Capital security cost sharing**

The budget request included \$27.3 million in Operation and Maintenance, Defense-wide, Budget Activity 04, line 35 for capital security cost sharing. The committee recommends a decrease of \$27.3 million for capital security cost sharing.

The National Defense Authorization Act for Fiscal Year 2004 permits funds appropriated to the Department of Defense to be transferred to the Department of State as payment for a fee charged by the Department of State for maintenance, upgrade, or construction of U.S. diplomatic facilities only to the extent that the amount charged in any given year exceeds the total amount of the unreimbursed costs incurred by the Department of Defense during that year in providing goods and services to the Department of State. The committee notes that the capital security cost sharing program has not been authorized by the Congress. If the program is authorized, the committee anticipates that in fiscal year 2005 the Department of Defense will provide unreimbursed goods and services to the Department of State valued in excess of \$27.3 million; therefore, the Department of Defense will not need the money included in the budget request for capital security cost sharing.

#### **Command Information Superiority Architectures Program**

The budget request included \$5.1 million in the Operation and Maintenance, Defense-wide, account for the Command Information Superiority Architectures (CISA) Program. This program focuses on developing net-centric transition plans and architectures for the combatant commands. The amount provided in the budget request will provide for architecture models at two of the combatant commands (Joint Forces Command and United States Strategic Command) that will be used to guide the net-centric transition in future fiscal years. Additional funds are needed to expand this architec-

ture program to the other combatant commands. The committee recommends an increase of \$3.5 million in the Operation and Maintenance, Defense-wide, account for CISA to accelerate this program.

#### **Information assurance scholarship program**

The budget request included \$7.0 million in Operations and Maintenance, Defense-wide, for the information assurance scholarship program. The committee recommends an increase of \$3.0 million in Operation and Maintenance, Defense-wide for this program, to increase the number of scholarships and grants the Department of Defense will be able to award in fiscal year 2005.

This program was established by section 922 of the Floyd D. Spence National Defense Authorization Act for Fiscal Year 2001. The committee strongly supports this program, and is encouraged that the Department has established a strong foundation of participating schools and is receiving significant interest from prospective students. The need to develop and sustain a strong, professional workforce of information assurance professionals within the Department remains an essential goal.

### **Guard and Reserve Component**

#### **Cannon bore cleaning**

The budget request included \$180.2 million in Operation and Maintenance, Army National Guard (OMARNG), for force readiness operations support, including maintenance of artillery, tank, and mortar tubes. In the Senate report to accompany S. 1050 (S. Rpt. 108-46), the committee discussed the merits of bore cleaning processes that use fluid wash in an environmentally compliant fashion. The committee continues to support the efforts of the Army National Guard to employ this type of bore cleaning process. Therefore, the committee recommends an increase of \$1.65 million in OMARNG for cannon bore cleaning systems, using water and solutions that comply with environmental laws and regulations.

#### **Chemical Biological Response Aid for Weapons of Mass Destruction—Civil Support Teams**

The budget request for Operations and Maintenance, Army National Guard (OMARNG) included \$58.9 million for Weapons of Mass Destruction—Civil Support Teams (WMD—CST), but no funding for updated emergency response software for the WMD—CSTs. Therefore, the committee recommends an additional \$1.0 million in OMARNG Guard to procure state-of-the-art chemical biological response aid software. Such software provides all the information, including critical data for all of the significant chemical and biological agents, needed to rapidly identify the suspected agent and to develop detailed response plans for responding to a terrorist attack involving the use of weapons of mass destruction, or a toxic industrial chemical incident.

### **Chemical, Biological, Radiological, Nuclear and High Yield Explosive Enhanced Response Force Package**

The budget request included no funding for the National Guard's newly established Chemical, Biological, Radiological, Nuclear and High Yield Explosive (CBRNE) Enhanced Response Force Package (NG CERFP). The committee recommends an increase of \$1.9 million to provide sustainment funding for the NG CERFP and directs that the \$1.9 million be allocated as follows: Operations and Maintenance, Army National Guard, \$1.5 million; and Operations and Maintenance, Air National Guard, \$.4 million.

A "Defense Science Board 2003 Summer Study" encouraged the Secretary of Defense to task the Chief, National Guard Bureau, to report on the feasibility of expanding 10 of the Weapons of Mass Destruction-Civil Support Teams (WMD-CST), so that each of the 10 has a full, single-unit capability roughly equivalent to that of the Marine Corps' Chemical-Biological Incident Response Force (CBIRF). This augmentation would permit strategic positioning of 10 additional CBIRF-equivalents throughout the United States, one in each Federal Emergency Management Agency (FEMA) region, while utilizing the Guard's command-and-control and operational integration with the civilian emergency response community. In testimony before the Committee on Armed Services of the Senate, the Commander, U.S. Northern Command, strongly endorsed this added capability.

### **Military technicians pay in excess of requirements**

Based on analysis of the services' actual mobilization data as of January 31, 2004, the General Accounting Office projects that the Department of Defense could realize \$44.3 million in cost avoidance per month for mobilized military technicians (MILTechs), for a total savings in fiscal year 2005 of \$532.1 million. Normally, compensation costs plus benefits for MILTechs in their capacity as civilian employees are included in Operation and Maintenance Appropriation accounts. When MILTechs are mobilized, their compensation is covered by the Military Personnel Appropriation account. Assuming that the services experience the same level of Reserve participation in the ongoing Global War on Terrorism in fiscal year 2005, the Department will not require the amounts included in its budget request for MILTechs. Therefore, the committee recommends reducing the operation and maintenance accounts by \$532.1 million, as follows:

Operation and Maintenance, Army National Guard—\$227.4 million;

Operation and Maintenance, Army Reserve—\$82.4 million;

Operation and Maintenance, Air National Guard—\$137.3 million; and

Operation and Maintenance, Air Force Reserve—\$85.0 million.

### **Extended Cold Weather Clothing System**

The budget request included no funding for the Extended Cold Weather Clothing System (ECWCS) for the men and women of the Air National Guard. The committee notes that ECWCS provides protection to airmen during extreme environmental conditions. The

committee, therefore, recommends an increase of \$2.0 million in Operation and Maintenance, Air National Guard, for ECWCS.

#### **Air National Guard depot maintenance**

The budget request included \$676.6 million in Operation and Maintenance, Air National Guard (OMANG), for the Air National Guard depot maintenance program. As discussed elsewhere in this report, the committee recommends a transfer of \$78.8 million from Operation and Maintenance, Air Force, to OMANG for the Air National Guard depot maintenance program.

### **Miscellaneous and Other Programs**

#### **Environmental compliance assurance and enhancement at Holston Army Ammunition Plant**

The budget request included \$400.9 million in Operation and Maintenance, Army, for environmental restoration. The committee recommends an increase of \$3.8 million for environmental compliance assurance and enhancement at the Holston Army Ammunition Plant. These environmental restoration activities will enable Holston Army Ammunition Plant to evaluate, engineer, and implement improved environmental monitoring, including both new and refined technologies, to ensure compliance and to help the plant meet higher environmental standards.

#### **Fort Hood offsite conservation program**

The budget request included \$400.9 million in Operation and Maintenance, Army, for environmental restoration. The committee recommends an increase of \$850,000 for the Fort Hood off-site conservation program to enroll landowners in a program to restore and maintain off-site habitat for the black-capped vireo and the golden-cheeked warbler. The committee notes that the increased amount of habitat for these two species has caused additional restrictions to Fort Hood training areas. By providing incentives to landowners for establishing habitat on their land, Fort Hood should be allowed to reduce the restrictions on certain training areas.

#### **Funding for Formerly Used Defense Sites**

The budget request included \$216.5 million for cleanup of Formerly Used Defense Sites (FUDS). The committee recommends an increase of \$40.0 million for FUDS cleanup.

The Army is the executive agent for cleanup of FUDS; the Army Corps of Engineers manages and executes actual remediation activities. The committee notes that the budget request is well below the level of \$283.0 million authorized and appropriated for this program in fiscal year 2004, even though the scope and challenges of FUDS cleanup remains substantial. The FUDS program requires substantial increases to the planned funding levels if it is to complete cleanup.

Last year, the committee directed the Secretary of Defense and the Secretary of the Army to address the lack of funding support for FUDS within the Department and the Army. The committee is disappointed that there has been no response to the direction. The committee expects the Department to demonstrate its commitment

to FUDS cleanup by increasing the amount of funding in the out years dedicated to this important program.

#### **Overseas Contingency Operations Transfer Fund**

The budget request included \$30.0 million for the Overseas Contingency Operations Transfer Fund (OCOTF). The committee notes that funding for contingency operations in Kosovo and Bosnia is included in the operation and maintenance accounts of the services and defense agencies. Remaining contingency operations are covered in emergency supplemental requests and are not funded through the OCOTF. As ongoing operations are accounted for in both the normal budget process and supplemental appropriations, a contingency operations fund is not needed. The committee, therefore, recommends a reduction of \$30.0 million from the Overseas Contingency Operations Transfer Fund.

#### **Other Programs**

##### **Defense and Veterans Head Injury Program**

The budget request included \$17.2 billion for the defense health program, of which \$7.0 million was for the Defense and Veterans Head Injury Program. The Department of Defense administers the program among eight military and veterans affairs facilities and one private care facility to provide care, rehabilitative treatment, evaluation, and clinical research on the care of military patients and veterans who have suffered a head injury as a result of combat or other injuries. The committee supports the objectives of the program to more accurately identify and care for persons suffering from traumatic brain injury, particularly those with injuries incurred while serving in support of Operation Iraqi Freedom. Accordingly, the committee recommends an increase of \$2.0 million in the defense health program account for the Defense and Veterans Head Injury Program.

##### **Funding for pharmaceuticals in retail networks**

The budget request included \$17.2 billion for the defense health program, of which \$0.9 billion was for pharmaceuticals purchased in retail pharmacies. The budget request reflected \$172.0 million in savings related to the use of federal pricing for retail pharmaceuticals in fiscal year 2005. The committee understands that the funding in the defense health program request did not reflect anticipated savings for retail pharmaceuticals beginning in June 2004, when federal pricing authorized by the Secretary of Veterans Affairs under title 38, United States Code, is applied in a new retail pharmacy program. Accordingly, the committee recommends a decrease of \$44 million in the defense health program account.

##### **Military amputee patient care program at Walter Reed Army Medical Center**

The budget request included \$17.2 billion for the defense health program and contained no funding for care for increased numbers of amputees requiring treatment and rehabilitation. The global war on terrorism is causing a surge in combat injuries involving amputation of major limbs. The committee has learned that as of March

30, 2004, ninety-two military personnel had lost one or more limbs as a direct result of Operation Iraqi Freedom and Operation Enduring Freedom. Eighty military amputees and one civilian have been cared for at the military amputee patient care program at Walter Reed Army Medical Center. The military amputee program's mission is to rehabilitate military amputee patients to the highest level of physical function and return them to active duty if possible. The treatment and care resources at Walter Reed Army Medical Center are designed for routine cases and workload and are inadequate for the recent large influx of military amputee patients. Amputations caused by blast injuries present a more complex wounding pattern and require more complex clinical care than amputations resulting from disease or other trauma. Accordingly, the committee recommends an increase of \$7.8 million in the defense health program account to increase treatment and care at the military amputee patient care program at Walter Reed Army Medical Center.

#### **Counternarcotics activities in Afghanistan**

The budget request included \$852.7 million in Operation and Maintenance, Defense-wide for the Department of Defense Counternarcotics Program. Of this amount, approximately \$14.0 million is allocated for counternarcotics efforts in Afghanistan.

The committee is concerned that opium cultivation and heroin trafficking in Afghanistan has increased and will reach record levels in 2004. The danger of drug trafficking activities providing funds for terrorist organizations and terrorist activities cannot be overstated. Additionally, the potential instability associated with related criminal activity and the subversive activities of warlords associated with drug trafficking could seriously undermine efforts to stabilize Afghanistan, and establish the conditions necessary for democratic government and successful reconstruction activities.

Counternarcotics efforts, led by the British with U.S. assistance, are underway in Afghanistan, but these efforts do not appear to have been successful at discouraging narcotics cultivation, production, and trafficking. The Emergency Supplemental Appropriations Act for Fiscal Year 2004 provided \$73.3 million to support increased counternarcotics efforts in Afghanistan. While the results of these efforts will not be known until 2005, it is clear that this potential threat must be confronted with a comprehensive, sustained effort to eliminate narcotics production and trafficking in Afghanistan and to encourage alternative livelihoods.

The committee supports the budget request for \$852.7 million for the Department's Counternarcotics Program and recommends that of the total amount authorized to be appropriated, \$50.0 million shall be used only for increased counternarcotics efforts in Afghanistan.

#### **Audits of Department of Defense financial statements**

The budget request included \$231.0 million in the Department of Defense's budget for audits of the Department's financial statements. This amount is double the fiscal year 2004 level of \$115.5 million. The General Accounting Office has testified to the Readiness Subcommittee of the Committee on Armed Services of the



Senate that spending on audits before the Department has financial management systems in place to support such audits is not the best use of limited resources. Therefore, the committee recommends a reduction of \$80.0 million in the Department's Inspector General's budget for audits of the Department's financial systems.

#### **Pueblo Chemical Agent Disposal Facility**

The budget request included \$154.2 million for the Assembled Chemical Weapons Alternatives (ACWA) Chemical Demilitarization—research and development program, including \$4.6 million for research and development activities at the Pueblo Chemical Agent Disposal Facility, Pueblo, Colorado. This funding request reflects a reduction of \$147.0 million from the original Cost Analysis Improvement Group (CAIG) estimates that were provided in the Future Years Defense Program, submitted with the fiscal year 2004 budget request. The committee recommends an increase of \$147.0 million to restore the funding for the Chemical Demilitarization research and development program at the Pueblo Chemical Agent Disposal Facility.

The committee is concerned that the budget request provides insufficient funding to ensure that the United States can meet its treaty obligations under the Chemical Weapons Convention (CWC) to completely destroy the U.S. chemical weapons stockpile by April 2007. The committee believes this level of funding would be required to meet a deadline of April 2012, in the event that the United States seeks and is granted a five-year extension under the treaty. In addition, any delay in execution of this program unnecessarily prolongs the risk that a chemical weapons storage site could be the target of a terrorist attack, and increases the risk of a weapon leak or accident.

The committee is concerned about the oversight and management of the ACWA program. A series of recent reports by the General Accounting Office indicated that the program was not meeting its goals and objectives because of its bifurcated management, lack of a comprehensive strategy, and an inadequate funding stream.

Therefore, the committee directs the Secretary of the Army, who is responsible for executing the Chemical Agents and Munitions Destruction program, and the Under Secretary of Defense for Acquisition, Technology and Logistics to jointly prepare a strategic plan for the future activities of the Chemical Demilitarization program. The plan shall include, at a minimum, consideration of: realistic budgeting; contingency planning for foreseeable or anticipated problems; and a management approach and associated actions that are designed both to ensure full compliance with U.S. obligations under the CWC and to take full advantage of opportunities to accelerate destruction of the chemical stockpile.

#### **Items of Special Interest**

##### **Assessment of environmental remediation of unexploded ordnance, discarded military munitions, and munitions constituents**

The committee expresses concerns about the potential cost and duration of cleanup and remediation of unexploded ordnance, dis-

carded military munitions, and munitions constituents. The Department of Defense's fiscal year 2003 "Report on Environmental Restoration Activities" was submitted to Congress on April 29, 2004. The report contains costs to complete for the Department's military munitions response program (MMRP), along with some interim program goals and funding projections. However, the report does not fully address many of the issues required in section 313 of the National Defense Authorization Act for Fiscal Year 2002.

The assessment was required to include: (1) estimates of the aggregate projected costs of remediation; (2) a comprehensive plan for addressing remediation requirements, including an assessment of the funding required and the period of time over which the funding will be required; (3) an assessment of the technology available to conduct remediation; and (4) an assessment of the impact of improved technology on remediation cost and a plan for the development and use of such improved technology. Section 313 also required that the impact of assumptions underlying cost estimates be set forth in the report; and that the report separately address the cost of addressing any groundwater contamination that may be caused by unexploded ordnance, discarded military munitions, and munitions constituents.

The committee notes that the report identifies almost \$16.0 billion in MMRP funding for active installations and formerly utilized defense sites that will be required in fiscal year 2010 and thereafter. At the current rate of funding, it would take close to 150 years to complete the program.

In addition, the report does not discuss the technology currently available to conduct remediation or the impact of improved technology on the cost of remediation; does not identify assumptions underlying cost estimates or their impact on projected funding requirements; and does not separately identify the cost of addressing ground water contamination.

The committee notes that a 2003 report of the Defense Science Board (DSB) and a 2003 audit of the Comptroller General both expressed concerns with the lack of a comprehensive plan by the Department regarding the cleanup of unexploded ordnance.

The committee recognizes that the environmental remediation of unexploded ordnance, discarded military munitions, and munitions constituents located at current and former facilities of the Department is a mammoth undertaking that will require years to plan and to complete. Nonetheless, the committee expects the Department to ensure that its fiscal year 2004 "Report on Environmental Restoration Activities" will fill in the gaps left by the Department's fiscal year 2003 report and bring the Department into full compliance with the requirements of section 313. Additionally, in the fiscal year 2004 "Report on Environmental Restoration Activities," the committee encourages the Department to respond to the recommendations included in the 2003 DSB and General Accounting Office reports.

**Department of Defense compliance with federal provisions  
pertaining to military depot capabilities in 2005 Base  
Realignment and Closure recommendations**

The committee acknowledges that section 2464 of title 10, United States Code, requires the Department of Defense to maintain government-owned and operated logistics capabilities to include workforce and facilities, to ensure a ready and controlled source of technical competence and resources necessary to support an effective and timely response to a mobilization, a national defense contingency situation, and other emergency requirements. Section 2466 of the same title requires that no more than 50 percent of each military department's annual funding for depot level maintenance and repair activities goes to the private sector. While these sections are intended to preserve a certain level of depot and logistics capabilities in the Department, these sections also authorize the Secretary of Defense to waive these provisions for reasons of national security.

The committee believes that military base realignment and closure actions undertaken by the Department under authority provided in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended by the National Defense Authorization Act for 2002 (division B of Public Law 107-107) must be consistent with the provisions in title 10, United States Code, pertaining to the preservation of depot logistics capabilities.

Therefore, the committee directs the Secretary of Defense to ensure that the recommendations submitted to the Commission, pursuant to the Base Closure and Realignment Act authorization, adhere to sections 2464 and 2466 of Title 10, United States Code. The committee further directs the Secretary of Defense to ensure that the same recommendations will not result in the requirement to perpetually waive the provisions of sections 2464 and 2466 of title 10, United States Code.

**Innovative stewardship activities by the Department of Defense**

The committee encourages the Department of Defense to continue in its endeavor to use state-of-the-art practices in ecosystem valuation to improve information available for effective decision making. Congress commends these efforts, and directs the Department to continue its inquiry into methods and models for appraising and valuing natural infrastructure. Tools and concepts such as conservation banking, trading and credits should be considered as part of the normal sustainment, restoration and modernization cycle. Where appropriate, the Department is encouraged to use capability modeling to quantify natural assets, and to continue to define the value and returns these environmental costs and investments have created in local communities and surrounding areas.

**Military mail delivery**

In the Department of Defense Appropriations Act for Fiscal Year 2004 (Public Law 108-87) and in the Senate Report to the National Defense Authorization Act for Fiscal Year 2004 (S. Rpt. 108-46), Congress directed the Comptroller General to review mail delivery to U.S. forces stationed in Iraq, and to compare delivery efficiency

issues from Operation Desert Storm with those of Operation Iraqi Freedom. The findings issued in a report by the Comptroller General, "Long-standing Problems Hampering Mail Delivery Need To Be Resolved," April 2004, suggest that steps should be taken to improve management of military mail delivery. Among the findings of concern to the committee are the absence of an accurate system to measure timeliness of mail delivery, difficulty in conducting joint-service postal operations, inadequately trained personnel and inadequate postal facilities, mail handling equipment, and transportation assets. Timely mail delivery is a significant factor in morale of American troops serving overseas. The committee is concerned that the Department of Defense has permitted many of the problems identified by the Comptroller General to continue without sufficient remedy.

The committee directs the Secretary of Defense to provide to the Committees on Armed Services of the Senate and the House of Representatives by March 1, 2005 a report describing steps taken to improve and accelerate military postal operations. The report should include recommendations for legislation, if needed, and should reflect the incorporation of modern electronic means to monitor and track mail delivery in conjunction with movement of military personnel.

#### **Navy Reserve carrier airborne early warning squadrons**

The committee understands that the Navy plans to decommission in fiscal year 2005 one of two carrier airborne early warning squadrons (VAW) currently included in the force structure of the Naval Reserve air force. The committee notes that, for more than thirty years, Navy Reserve VAW squadrons have conducted missions in support of a number of operational requirements, including: fleet, joint, and multinational exercises; counterdrug operations; and National Air and Space Administration (NASA) mission support.

The committee is interested in ensuring that all of the benefits and efficiencies of a revised force structure of the Navy Reserve air force be fully examined prior to taking any action on either of the two currently commissioned Navy Reserve VAWs. The committee finds this examination to be particularly important for several reasons, including the fact that emerging additional Homeland Defense operational requirements may be assigned to units of the Navy Reserve. The Chief of Naval Reserve, in testimony before the Personnel Subcommittee, Committee on Armed Services of the Senate, on March 31, 2004, stated that a review currently being conducted, jointly by the Assistant Secretary of Defense for Homeland Defense and Assistant Secretary of Defense for Reserve Affairs, may result in increasing operational requirements for Navy Reserve units in support of Homeland Defense missions.

Therefore, the committee directs the Secretary of the Navy to conduct an analysis of alternatives and cost-benefit study prior to decommissioning any reserve VAW squadrons. The study should clearly identify each of the Navy Reserve VAW squadron force structure alternatives, including the establishment of Squadron Augment Units, that could be implemented to continue Navy Reserve air support to historical missions and emerging operational requirements. For each alternative, the study should identify and

explain the benefits of the alternative and the costs associated with that alternative. Assessment categories should include, but are not limited to, collocation with active Navy operational VAW squadrons and VAW command and control organizations, accessibility of maintenance personnel and facilities, quality of life for squadron full time support (FTS) and reserve personnel, and funding requirements of reserve personnel to support operations. The committee directs the Secretary to submit the results of the study to the congressional defense committees 60 days prior to any action that will change the current VAW force structure of the Navy Reserve air force.

### **Prevention and mitigation of corrosion**

Public Law 107-314, Section 1067, required the Department of Defense to designate a single official or organization with the overall responsibility of preventing and mitigating the corrosion of military equipment and infrastructure, and assigned numerous planning and oversight responsibilities. The committee commends the Department for the actions it has taken to comply with section 1067 and address corrosion more comprehensively across the Department, but believes that additional actions should be taken by the Department to continue to support the efforts of the new office of Corrosion Policy and Oversight (CPO).

For example, the committee understands that the fiscal year 2005 budget request includes \$27.0 million in various service accounts that are intended to be used for CPO efforts, including the operation of the CPO office itself and various corrosion initiatives by the military services. The committee is concerned that this approach to budgeting for the CPO and CPO initiatives may not provide sufficient visibility or transparency for these funds. Therefore, the committee urges the Under Secretary of Defense (Comptroller) to establish, by December 1, 2004, a specific funding mechanism for use by the Department of Defense in fiscal year 2006, such as a program element or budget line. This mechanism should provide visibility over expended, budgeted, and programmed funds for the CPO and CPO activities. The committee directs the Undersecretary of Defense (Comptroller) to report to the committee by January 1, 2005, the funding mechanism selected for the fiscal year 2006 budget for the CPO and CPO initiatives and to identify CPO funding across the future years defense plan.

The committee understands that the CPO has identified almost \$1.9 billion in corrosion-related projects that could directly contribute to cost avoidance, improved readiness, and decreased workload over the next six years. The committee expects the upcoming program review to result in solid support for these efforts.

Finally, the committee applauds the efforts of the CPO to establish a baseline of the impact of corrosion on cost, safety, and readiness against which the effectiveness and efficiency of corrosion control efforts could be evaluated. The committee notes the utility of examining a number of weapons platforms to establish the baseline, including helicopters. The committee understands that under the current plan a working baseline will be established by 2008, but not completed until 2011. The committee believes that this effort is critical, and recommends that funding for the study be accel-

erated. Because the CPO is not yet fully institutionalized within the Department, the committee directs the General Accounting Office to continue its evaluation of the CPO's strategic plan through the end of fiscal year 2005.

## TITLE IV—MILITARY PERSONNEL AUTHORIZATIONS

### Subtitle A—Active Forces

#### End strengths for active forces (sec. 401)

The committee recommends a provision that would authorize active duty end strengths for fiscal year 2005 as shown below:

	Fiscal year—		
	2004 authoriza- tion	2005 request	2005 rec- ommendation
Army .....	482,400	482,400	482,400
Navy .....	373,800	365,900	365,900
Marine Corps .....	175,000	175,000	175,000
Air Force .....	359,300	359,700	359,700

#### Additional authority for increases of Army active duty personnel end strengths for fiscal years 2005 through 2009 (sec. 402)

The committee recommends a provision that would authorize a temporary increase in the Army's Active-Duty end strength of up to 30,000 during fiscal years 2005 through 2009.

In recent testimony before the committee, the Secretary of Defense, the Acting Secretary of the Army, the Chairman of the Joint Chiefs of Staff, and the Chief of Staff of the Army urged the Congress to support the President's budget request regarding Active-Duty end strength while relying on supplemental wartime appropriations to pay for additional personnel costs. They noted that in September 2003, the President directed the continuation of the state of national emergency, and that under this authority, and pursuant to section 123a of title 10, United States Code, the Secretary of Defense had waived statutory end strength requirements and authorized the Army to increase its Active-Duty end strength by 30,000.

Relying on that authority, at the end of fiscal year 2003, the Army exceeded the statutory end strength limit of 480,000 by 19,300. The Army projects that its end strength at the end of fiscal year 2004 will be 20,700 above the level authorized in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136). However, over the next five years, the Army plans to reduce its Active-Duty end strength to the levels recommended in the budget request.

The committee supports the Department's position that priority should be placed on increasing the capabilities of the existing force and agrees that initiatives must be taken by the Army to enable it to make maximum use of its active forces. The committee believes that the temporary authority of this provision to increase active end strength by 30,000 is vital for the Army to rebalance skills

and force structure within the Active and Reserve components, retrain soldiers to perform tasks in high demand, restructure to establish at least 10 new combat brigades, implement unit manning, and examine billets and functions being performed by soldiers to determine which can better be performed by civilian employees.

The provision would require that if the Secretary of Defense plans to increase the Army Active-Duty end strength for a fiscal year, then the budget for the Department for such fiscal year as submitted to Congress shall specify the amounts necessary for funding the Active-Duty end strength of the Army in excess of 482,400.

### **Subtitle B—Reserve Forces**

#### **End strengths for Selected Reserve (sec. 411)**

The committee recommends a provision that would authorize Selected Reserve end strengths for fiscal year 2005, as shown below:

	Fiscal year—		
	2004 authoriza- tion	2005 request	2005 rec- ommendation
The Army National Guard of the United States .....	350,000	350,000	350,000
The Army Reserve .....	205,000	205,000	205,000
The Naval Reserve .....	85,900	83,400	83,400
The Marine Corps Reserve .....	39,600	39,600	39,600
The Air National Guard of the United States .....	107,030	106,800	106,800
The Air Force Reserve .....	75,800	76,100	76,100
The Coast Guard Reserve .....	10,000	10,000	10,000

#### **End strengths for Reserves on active duty in support of the Reserves (sec. 412)**

The committee recommends a provision that would authorize the full-time support for end strengths for fiscal year 2005 as shown below:

	Fiscal year—		
	2004 authoriza- tion	2005 request	2005 rec- ommendation
The Army National Guard of the United States .....	25,599	26,476	26,602
The Army Reserve .....	14,374	14,970	14,970
The Naval Reserve .....	14,384	14,152	14,152
The Marine Corps Reserve .....	2,261	2,261	2,261
The Air National Guard of the United States .....	12,191	12,225	12,253
The Air Force Reserve .....	1,660	1,900	1,900

The committee recommends increases of 1003 in the Army National Guard, 596 in the Army Reserve, and 62 in the Air National Guard. Additional personnel in the Army and Air National Guard have been included to enable seven additional Weapons of Mass Destruction-Civil Support Teams to be established. The committee supports the Army's planning in the budget request for increases in full-time support manning and the increase in unit readiness these personnel will provide.



**End strengths for military technicians (dual status) (sec. 413)**

The committee recommends a provision that would authorize end strengths for military technicians (dual status) for fiscal year 2005, as shown below:

	Fiscal year—		
	2004 authoriza- tion	2005 request	2005 rec- ommendation
The Army National Guard of the United States .....	24,589	25,076	25,076
The Army Reserve .....	6,949	7,299	7,299
The Air National Guard of the United States .....	22,806	22,956	22,956
The Air Force Reserve .....	9,991	9,954	9,954

**Fiscal year 2005 limitations on non-dual status technicians (sec. 414)**

The committee recommends a provision that would establish numerical limits on the number of non-dual status technicians who may be employed in the Department of Defense as of September 30, 2005, as shown below:

	Fiscal year—		
	2004 authoriza- tion	2005 request	2005 rec- ommendation
The Army National Guard of the United States .....	1,600	1,600	1,600
The Army Reserve .....	910	795	795
The Air National Guard of the United States .....	350	350	350
The Air Force Reserve .....	90	90	90

**Authorized strengths for Marine Corps Reserve officers in active status in grades below general officer (sec. 415)**

The committee recommends a provision that would amend the table in section 12005(c)(1) of title 10, United States Code, setting forth percentage limits on the number of Marine Corps Reserve officers in an active status in grades below O7. This provision would correct a discrepancy in the existing table that could unnecessarily limit the overall numbers of Marine Corps Reserve officers in an active status authorized under section 12003 of title 10, United States Code.

**Subtitle C—Authorization of Appropriations**

**Authorization of appropriations for military personnel (sec. 421)**

The committee recommends a provision that would authorize a total of \$104.5 billion for military personnel, a decrease of \$278.8 million below the budget request. This includes \$14.7 million for increases in Army and Air National Guard full-time support personnel to implement additional Weapons of Mass Destruction-Civil Support Teams; \$52.0 million for payment of special pay for duty subject to hostile fire or imminent danger at current levels; \$82.0 million for payment of family separation allowance at current levels; and a 3.5 percent pay raise for all eligible personnel. The provision would also authorize reductions of \$150.6 million from the

naval services' military personnel accounts for permanent change of station moves, and \$274.2 million from the services' military personnel accounts for Reserve cost avoidance.

#### **Armed Forces Retirement Home (sec. 422)**

The committee recommends a provision that would authorize \$61.2 million from the Armed Forces Retirement Home Trust Fund for fiscal year 2005.

### **Budget Items**

#### **Reserves cost avoidance**

Based on analysis of the services' current and planned mobilization of the Reserve component during fiscal years 2004 and 2005, the General Accounting Office (GAO) projects that the services will sustain military personnel strength levels lower than that planned in the Department of Defense's budget request due to their activation for the ongoing global war on terrorism. The GAO estimates cost avoidance of \$274.2 million for fiscal year 2005. Therefore, the committee recommends reducing the Reserve component military personnel accounts by \$274.2 million according to GAO's estimates, as follows:

- Army Reserve—\$2.1 million;
- Navy Reserve—\$41.2 million;
- Air Force Reserve—\$5.4 million;
- Army National Guard—\$218.1 million; and
- Air National Guard—\$7.4 million.

#### **Permanent change of station costs for the Navy and Marine Corps**

The budget request included \$835.1 million in the Military Personnel, Navy, account and \$337.9 million in the Military Personnel, Marine Corps, account for permanent change of station (PCS) travel. These amounts represent a 15 percent increase for the Navy and a 13 percent increase for the Marine Corps over the fiscal year 2004 authorized and appropriated levels. In contrast, the committee notes that the PCS accounts for the Army and Air Force reflect little growth over the fiscal year 2004 authorized and appropriated levels. The committee understands that the naval services justified their increases on two counts—as part of the global war on terrorism (GWOT), and because the services are retaining more personnel in higher ranks, making moves more expensive. However, the budget request is considered a “peacetime” budget, with costs associated with GWOT expected to be submitted to the Congress as part of a supplemental request. And, the Navy and Marine Corps report that the percentages of personnel holding different ranks has not changed from fiscal year 2004 to fiscal year 2005. Therefore, the committee considers the naval services PCS account growth unjustified, and recommends reducing the PCS accounts by \$150.6 million, as follows:

- Military Personnel, Navy—\$111.9 million and
- Military Personnel, Marine Corps—\$38.7 million.

## **TITLE V—MILITARY PERSONNEL POLICY**

### **Subtitle A—Joint Officer Personnel Management**

#### **Modification of conditions of eligibility for waiver of joint duty credit requirement for promotion to general or flag officer (sec. 501)**

The committee recommends a provision that would modify section 619a of title 10, United States Code, pertaining to waivers of the requirement that an Active-Duty officer complete a full tour of duty in a joint duty assignment prior to appointment to the rank of brigadier general or rear admiral (lower half). The provision would allow waivers in cases in which an officer's proposed selection for promotion is based primarily upon a career field specialty, vice scientific and technical qualifications, for which joint requirements do not exist. The committee expects such waivers to be used sparingly and only in career fields in which joint requirements clearly do not exist.

The provision would also modify section 619a(b)(4) of title 10, United States Code, pertaining to officers serving in joint duty assignments. The provision would eliminate the requirement that an officer serve in a joint assignment at least 180 days prior to the convening of a selection board for that officer to qualify for promotion to the rank of brigadier general or rear admiral (lower half), however, it would require that the officer's total consecutive service in joint duty assignments meet the requirements of section 664 of title 10, for credit for having completed a full tour of duty in a joint duty assignment. The committee believes that the 180-day requirement is unnecessary, and that the amendment would satisfy the goal of ensuring that all general and flag officers accrue sufficient joint experience.

#### **Management of Joint Specialty Officers (sec. 502)**

The committee recommends a provision that would amend section 661 of title 10, United States Code, to provide that officers shall be designated as Joint Specialty Officers (JSO) upon successfully completing, in any sequence, a program accredited by the Chairman of the Joint Chiefs of Staff that is offered by a joint professional military education institution and a full tour of duty in a joint duty assignment, or after completing two full tours of duty in a joint duty assignment. This provision would provide needed career path flexibility for officers in achieving the JSO designation, while ensuring that the requirements for joint professional education and experience are satisfied.

This provision would also specify that general and flag officer positions identified as joint duty assignments must be filled by officers with the joint specialty unless the Secretary of Defense determines that the assignment of officers without the joint specialty is

necessary and waives the requirement. This provides necessary flexibility to the Secretary in filling time sensitive, mission critical requirements more efficiently.

**Revised promotion policy objectives for joint officers (sec. 503)**

The committee recommends a provision that would modify section 662(a) of title 10, United States Code, to require the military departments to ensure that an adequate number of officers are eligible for promotion to brigadier general and rear admiral (lower half) to meet joint qualification requirements under section 619a of title 10, United States Code.

The provision would also make permanent the temporary authority regarding promotion comparison standards under section 662 of title 10, United States Code. It would require the Secretary of Defense to ensure that the qualifications of officers assigned to joint duty assignments are such that officers who are serving in or have served in joint duty assignments, including joint specialty officers (JSO), are expected, as a group to be promoted to the next higher grade at a rate not less than the rate for all officers of the same armed force in the same grade and competitive category. The committee believes that existing incentives in the law to achieve JSO designation, recent changes in chapter 38 of title 10, United States Code, which have made designation as a joint specialty officer more attainable, and overall acceptance by the services and the officer corps of the necessity of joint professional military education, joint service, and JSO designation, justify this permanent change to section 662.

**Length of Joint Duty Assignments (sec. 504)**

The committee recommends a provision that would amend section 664 of title 10, United States Code, to prescribe certain conditions under which officers shall qualify to receive full credit for joint duty. The provision would allow, for example, officers who serve in certain demanding or remote assignments, which are approved by the Secretary of Defense for joint duty tour lengths less than three years, and officers who accrue at least one year of cumulative service in one or more headquarters staffs within a U.S. or multinational joint task force to receive full joint credit. The provision would also allow the Secretary of Defense to waive the applicability of section 664 if he determines that it is in the national security interests of the United States to do so. The Committee believes that these changes are needed to afford additional flexibility for highly qualified officers in achieving joint specialty designation, while performing mission critical duties in operational environments.

**Repeal of minimum period requirement for Phase II Joint Professional Military Education (sec. 505)**

The committee recommends a provision that would modify section 663 of title 10, United States Code, by repealing the requirement that the principal course of instruction offered at the Joint Forces Staff College as phase II joint professional military education (JPME II) must be at least three months in duration. The

committee is aware of a National Defense University (NDU)-sponsored study that recently concluded that an improved JPME II course of 10 weeks duration can be offered at the Joint Forces Staff College that would achieve all required educational goals. The NDU study found that such a change would allow the addition of a fourth class each year and afford the opportunity for a better student to faculty ratio. The committee believes that the prescribed course length of three months is unnecessarily restrictive and that the Joint Forces Staff College, as a component of the NDU, should be permitted to modify the length of the JPME II course.

**Revised definitions applicable to joint duty (sec. 506)**

The committee recommends a provision that would modify section 668 of title 10, United States Code, to effect a minor technical change to the definition of the term “joint duty assignment” by specifying that the Secretary of Defense would publish a joint duty assignment list. The provision would also modify the definition regarding the term “tour of duty” to allow officers to continue accumulating joint credit if they serve consecutively in qualifying joint duty assignments. This would provide necessary flexibility in enabling officers to earn joint credit, while meeting mission essential requirements, without sacrificing the benefits of joint duty experience.

**Subtitle B—Other Officer Personnel Policy**

**Transition of active-duty list officer force to a force of all regular officers (sec. 511)**

The committee recommends a provision that would repeal section 532(e) of title 10, United States Code, which prohibits receipt of original appointments as a commissioned officer in the Regular Army, Regular Navy, Regular Marine Corps, or Regular Air Force after September 30, 1996. The provision would implement the recommendation of the Defense Science Board Task Force on Human Resources Strategy in February 2000 that all new officers, regardless of their commissioning source, be given regular commissions in order to enhance professionalism, esprit de corps, and retention. Consistent with the Defense Science Board’s recommendation, the committee recommends repeal of section 522 of title 10, United States Code, which sets limits on the numbers of regular officers serving on active duty.

The provision would also permit the Secretary of Defense to waive the requirement that an officer be a citizen of the United States for commissioning in grades below major or lieutenant commander in the Navy, if it is in the national security interests of the United States to do so, but would require that such officers become citizens before being considered for promotion to major, or lieutenant commander in the Navy. The provision would extend from age 35 to age 42 the statutory limit on initial commissioning as a regular officer. It would also remove the requirement for Senate confirmation of regular appointments in grades below major or lieutenant commander in the Navy. The provision would also amend various provisions of title 10, United States Code, to facilitate transfer

of regular officers from the Active-Duty List to the Reserve Active Status List.

**Eligibility of Navy staff corps officers to serve as Deputy Chiefs of Naval Operations and Assistant Chiefs of Naval Operations (sec. 512)**

The committee recommends a provision that would eliminate the requirement under sections 5036 and 5037 of title 10, United States Code, that officers serving in the positions of deputy chief of naval operations and assistant chief of naval operations be line officers. This provision would expand the pool of officers who may be considered for assignment in these highly responsible positions within the Office of the Chief of Naval Operations to include officers of the Navy staff corps.

**One-year extension of authority to waive joint duty experience as eligibility requirement for appointment of chiefs of Reserve components (sec. 513)**

The committee recommends a provision that would extend for one-year the authority of the Secretary of Defense to waive the requirement that officers being considered for appointment as chiefs of Reserve components must have significant joint duty experience. The committee expects the Department to continue its efforts to develop opportunities for joint professional military education and experience to ensure that future senior leaders of the Reserve components are fully qualified in joint warfighting.

**Limitation on number of officers frocked to major general and rear admiral (upper half) (sec. 514)**

The committee recommends a provision that would provide that the total number of brigadier generals and rear admirals (lower half) on the Active-Duty List who are authorized to be frocked to the grade of major general or rear admiral (upper half) may not exceed 30.

The committee is concerned that the current emphasis throughout the Department of Defense on the practice of frocking is a symptom of underlying problems in the services' management of the officer corps, particularly in the general and flag officer ranks. Promotion selection boards are being conducted, in some instances, three years before officers being considered reasonably can expect to be promoted to higher rank. These practices, at a minimum, impose excessive, unjustifiable waiting periods upon officers who have been selected for promotion. Moreover, it denies selection officials the opportunity to review additional officer evaluation reports that could be of critical importance in identifying the best qualified officers for promotion.

The controls on frocking set forth in section 777 of title 10, United States Code, were established by section 503 of the National Defense Authorization Act for Fiscal Year 1996. In the report accompanying S. 1026 (S. Rept. 104-112), the committee expressed its views about the practice of frocking, pertinent parts of which are shown below continue to be relevant:

Frocking is the practice of allowing an officer to wear the insignia of a higher grade prior to that officer's being

appointed to that higher grade. While the Department of Defense has attempted to control the extent of frocking through regulation, the practice remains a means by which the services circumvent the statutory limits on the number of officers authorized to serve in certain grades . . .

The committee recognizes the existence of certain situations, primarily in the international arena, in which it may be in the best interests of the United States to frock certain officers. The committee believes, however, that such situations should be viewed as the exception and not the rule.

The provision recommended by the committee adds an additional control to those already set forth in section 777 of title 10, United States Code, on the number of officers that may be frocked at any time. The committee urges the Department to identify the Officer Corps promotion progression issues that underlay the perceived requirement to frock officers and implement remedial measures.

#### **Subtitle C—Reserve Component Personnel Policy**

##### **Repeal of exclusion of active duty for training from authority to order Reserves to active duty (sec. 521)**

The committee recommends a provision that would modify various sections in chapter 1209 of title 10, United States Code, to repeal the exclusion of active duty for training from the authority to order Reserves to active duty during war or national emergency. This would provide the Department of Defense with improved access to Reserve component personnel during war or national emergency for the purpose of individual or collective skill training required to meet deployment standards and timelines for emergent missions or contingencies. It would also provide a statutory framework for a flexible “train, mobilize, and deploy” posture for reservists, thus facilitating rapid activation, training, and tailoring of Reserve forces to meet emergent missions.

##### **Exception to mandatory retention of Reserves on active duty to qualify for retirement pay (sec. 522)**

The committee recommends a provision that would modify section 12686(a) of title 10, United States Code, in order to clarify that reserve component members on active duty other than for training, who are within two years of qualifying for retired pay for non-regular service under chapter 1223 of title 10, United States Code, are not required to be retained on active duty to ensure they are eligible to receive retired pay for non-regular service. The provision would correct an erroneous interpretation that reservists must be retained on active duty if they are between the ages of 58 and 60.

#### **Subtitle D—Education and Training**

##### **One-year extension of Army College First Pilot Program (sec. 531)**

The committee recommends a provision that would extend, until December 31, 2005, the duration of the Army College First Pilot Program. The Program offers a unique enlistment incentive that al-

lows college students to enlist in the Army in the delayed entry program, to continue with their college education, to receive a monthly stipend from the Army, and then to enter the Army in the grade of E-4 (if at least 30 college credits were earned under the program). In its report on the Program, submitted pursuant to section 573 of the National Defense Authorization Act for Fiscal Year 2000 (Public Law 106-65), the Army concluded that the program has proven effective in increasing the number of highly qualified recruits.

**Military recruiter equal access to campus (sec. 532)**

The committee recommends a provision that would amend section 983(b)(1) of title 10, United States Code, to clarify the legislative intent that covered funds described in this section shall be denied to an institution of higher education (including any subelement of that institution) that prohibits or, in effect, prevents military recruiters from gaining access to campuses or access to students (who are 17 years of age or older) on campuses, for purposes of military recruiting in a manner that is at least equal in quality and scope to the degree of access to campuses and to students that is provided to any other employer.

The committee is concerned about incidents of unequal treatment of military recruiters at certain colleges and universities, and subsequent efforts by these institutions to justify inferior, unequal treatment of military recruiters in order to continue to qualify for receipt of covered federal funding. The Secretary of Defense and service secretaries are urged to fairly and diligently continue implementing the provisions of section 983 of title 10, United States Code, and colleges and universities are urged to take the measures necessary to ensure that equal access is provided to enable the services to achieve recruiting goals for the All-Volunteer force.

**Exclusion from denial of funds for preventing ROTC access to campus of amounts to cover individual costs of attendance at institutions of higher education (sec. 533)**

The committee recommends a provision that would amend section 983 of title 10, United States Code, to state that federal funding provided to an institution of higher education, or to an individual, to be available solely for student financial assistance, related administrative costs, or costs associated with attendance, is excluded from the covered funds that may be denied for preventing ROTC or military recruiter access to institutions of higher education equal to that provided to private employers. This provision restates and codifies existing law as set forth in section 8120 of the Department of Defense Appropriations Act of 2000 (Public Law 106-79).

**Transfer of authority to confer degrees upon graduates of the Community College of the Air Force (sec. 534)**

The committee recommends a provision that would authorize the Commander of the Air University to confer associate level academic degrees on graduates of the Community College of the Air Force. This change would align the Community College of the Air Force with all other Air University programs by ensuring that only the



Commander of the Air University is responsible for conferring degrees, and is responsive to a recommendation to this effect by the accrediting authority for Air University programs, the Southern Association of Colleges and Schools.

#### **Subtitle E—Decorations, Awards, and Commendations**

##### **Award of medal of honor to individual interred in the Tomb of the Unknowns as representative of casualties of a war (sec. 541)**

The committee recommends a provision that would clarify that the posthumous award of a medal of honor to a deceased member of the Armed Forces, who as an unidentified casualty of a particular war or other armed conflict, is interred in the Tomb of the Unknowns at Arlington National Cemetery, Virginia, is awarded to that member as a representative of the members of the Armed Forces who died in such war or other armed conflict and whose remains have not been identified, and not to the individual personally.

##### **Separate campaign medals for Operation Enduring Freedom and for Operation Iraqi Freedom (sec. 542)**

The committee recommends a provision that would require the President to establish campaign medals specifically to recognize service by members of the uniformed services in Operation Enduring Freedom and a separate campaign medal to recognize service by members of the uniformed services in Operation Iraqi Freedom.

The committee believes that establishment of medals acknowledging service in these historic, ongoing military operations is fully warranted and notes that on May 6, 2004, the committee favorably reported out H.R. 3104, an Act to provide for the establishment of separate campaign medals to be awarded to members of the uniformed services who participate in Operation Enduring Freedom and to members who of the uniformed services who participate in Operation Iraqi Freedom.

#### **Subtitle F—Military Justice**

##### **Reduced blood alcohol content limit for offense of drunken operation of a vehicle, aircraft, or vessel (sec. 551)**

The committee recommends a provision that would amend Article 111 of the Uniform Code of Military Justice (10 U.S.C. 911) to lower the permissible blood alcohol concentration for the offense of drunken operation of a vehicle, aircraft, or vessel from the lesser of 0.10 grams or the limit prescribed in the State in which the offense occurred to the lesser of 0.08 grams or the limit prescribed in the State in which the offense occurred.

Section 351 of the Department of Transportation and Related Agencies Appropriations Act, 2001 (Public Law 106-346) required the States, as a condition to continued receipt of full federal aid highway funding, to enact laws lowering their permissible blood alcohol concentrations to 0.08. By the beginning of 2004, 46 States had done so. This amendment brings the Uniform Code of Military Justice's overall limit into line with that enacted by these States.

**Waiver of recoupment of time lost for confinement in connection with a trial (sec. 552)**

The committee recommends a provision that would amend section 972 of title 10, United States Code, to require the Secretary concerned to waive time lost when a member is confined by military or civilian authorities for more than one day in connection with a trial, if: the charge is thereafter dismissed, the trial results in an acquittal, a conviction is thereafter set aside (other than for clemency), or a judgment of acquittal or a dismissal is entered upon a reversal of the conviction on appeal. Present law requires an enlisted member to make up all time lost, and deprives an officer of service credit for time lost, regardless of the ultimate disposition of the charge that gave rise to the member's confinement.

**Department of Defense policy and procedures on prevention and response to sexual assaults involving members of the Armed Forces (sec. 553)**

The committee recommends a provision that would direct the Secretary of Defense to promulgate, by January 1, 2005, a uniform Department of Defense policy for the prevention of and response to sexual assaults involving members of the Armed Forces and the service secretaries to prescribe regulations on the policies and procedures on the prevention of and response to sexual assaults involving members of the Armed Forces by March 1, 2005.

The provision additionally would require the Secretaries of the military departments to prescribe programs throughout each service designated for victim advocacy and intervention, both at home stations and in deployed locations. Uniform training, reporting and disciplinary procedures would be required for each military department, as well as an annual assessment of the effectiveness of the service's policies to prevent and respond to sexual assault and violence. The provision would require an annual report to Congress by the Secretary of Defense on the number of sexual assaults, rapes and other sexual offenses involving military personnel, the number of cases substantiated, a synopsis of disciplinary action taken in substantiated cases, and policies and programs implemented by the Secretary to prevent and respond to sexual assault and violence.

For the past year, the committee has been engaged in overseeing the Air Force's response to allegations of sexual misconduct and abusive treatment of female cadets at the Air Force Academy. The Department of Defense Inspector General continues to evaluate the Air Force Academy's disposition of cases and investigate the actions of previous Academy and Air Force leaders for the purpose of establishing accountability. The history of this problem, underscored by the findings of the Panel to Review Sexual Misconduct Allegations at the U.S. Air Force Academy headed by former Congresswoman Tillie K. Fowler, raised serious issues about the institutional acceptance of women at the Air Force Academy and the Academy's ability to provide an appropriate environment for both male and female cadets.

Similar concerns have been raised in recent months regarding women on Active-Duty in the Armed Forces stemming from the manner in which complaints of rape and sexual assault have been handled by commanders. Acknowledgment by the Army of over 80

complaints of rape or sexual assault against female soldiers in connection with Operation Iraqi Freedom and by the Air Force of scores of such cases in the Air Force training command and in various units in the Air Force's Pacific Command have demonstrated that this problem, at a minimum, is widespread and poorly understood, and that corrective action must be taken.

On February 25, 2004, the Subcommittee on Personnel conducted a hearing on policies and programs for preventing and responding to incidents of sexual assault in the armed services. The Under Secretary of Defense for Personnel and Readiness and the vice chiefs of each of the services testified. The Subcommittee heard testimony about the Department's newly formed Task Force on Care for Victims of Sexual Assault. The subcommittee received assurances that women in uniform will be protected, that allegations will be investigated and perpetrators of offenses prosecuted, and that commanders will be assisted in understanding how to respond to the needs of victims.

The committee recognizes that incidents of sexual assault require competent responses from law enforcement, medical, legal, and victim advocate personnel. Superiors and peers in the chain of command must be informed and trained how to respond to incidents of sexual assaults. Officers in command must be prepared, and supported, with necessary resources to enable them to take appropriate measures to ensure that victims' needs are addressed, accused's rights under the Uniform Code of Military Justice are protected, and that cases are timely investigated and resolved. The committee reiterates its view that a "zero tolerance" policy is the only appropriate standard for services to adopt with respect to incidents of sexual assault.

The committee looks forward to the report of the DoD Task Force and to the initiatives that the services will implement. Each service must establish a program that will ensure trained advocates for victims of rape and sexual assault are readily available at the unit level to assist victims and also in advising command leadership about what steps should be taken. At the subcommittee hearing, testimony concerning the Navy's Sexual Assault Victim Intervention (SAVI) program was received. The committee believes that this is an excellent model that all the services should emulate.

The committee commends the work of community-based advocates such as the Miles Foundation, which have provided assistance to military victims of sexual assault and courageous individuals who have come forward with their personal experiences in the hope of eliminating sexual assault and violence from the military. The committee extends its gratitude to organizations and individuals who have helped focus attention on this serious problem.

#### **Subtitle G—Scope of Duties of Ready Reserve Personnel in Inactive Duty Status**

##### **Redesignation of inactive-duty training to encompass operational and other duties performed by Reserves while in inactive status (sec. 561–564)**

The committee recommends a provision that would redesignate the duty status applicable to members of the reserve components

of the Armed Forces known as “inactive-duty training” as “inactive duty.” The revised term encompasses both training and operational purposes, and more accurately reflects the intended mission and capabilities of the modern Reserve component. These provisions would also repeal funeral honors duty status, because specification of this category of inactive duty would no longer be necessary, and amend several other provisions to conform with these changes.

### **Subtitle H—Other Matters**

#### **Accession of persons with specialized skills (sec. 571)**

The committee recommends a provision that would amend section 651 of title 10, United States Code, to permit the service secretaries to establish an alternate minimum military service obligation for persons accessed into the Armed Forces who have unique skills acquired in a civilian occupation, such as engineers, scientists, and information technology professionals. The current mandatory initial service obligation, ranging from six to eight years, may discourage qualified individuals with these skills from serving in the military. This provision would permit a flexible, alternative period of obligated service that the service secretaries consider appropriate to meet the needs of the Armed Forces.

This provision would also amend section 671 of title 10, United States Code, to permit the service secretaries to establish expedited basic training requirements for certain individuals, such as linguists, engineers, scientists, information technology professionals, and other professionals from very specialized or highly technical fields. Expedited training in some cases may be necessary to allow the Department of Defense to meet exigent mission requirements. The committee expects the Department to ensure that the type, level, and duration of the training needed to prepare recruits who possess critical skills are sufficient to fulfill their responsibilities.

#### **Federal write-in ballots for absentee military voters located in the United States (sec. 572)**

The committee recommends a provision that would amend section 1973ff(b) of title 42, United States Code, to authorize absent military voters and their dependents, who are stationed in the United States but absent from their home states, to use federal write-in absentee ballots.

Operational considerations and the mobility of military personnel often make it difficult for them to specify accurately the mailing address they will be using in the period immediately prior to a general election. Changes in deployment schedules or receipt of orders with short notice may prevent them from receiving state-provided absentee ballots in the mail in time for the election. Allowing absentee military voters and their dependents to use the federal write-in absentee ballots even when stationed in the United States would remedy these problems.

**Renaming of National Guard Challenge Program and increase in maximum Federal share of cost of State programs under the program (sec. 573)**

The committee recommends a provision that would amend section 509 of title 32, United States Code, to change the name of the National Guard Challenge Program to the National Guard Youth Challenge Program. Additionally, pursuant to a Department of Defense recommendation in the report of the study on the National Guard Challenge program required by section 587 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136), the committee recommends a provision that would phase in over three years an increase in the matching funds ratio to increase the amount of federal funds that may be provided to a State program not to exceed 65 percent of a State program's operating costs in fiscal year 2005, 70 percent in 2006, and 75 percent by fiscal year 2007 and in each subsequent fiscal year. The provision would also authorize an additional \$11.0 million of Operations and Maintenance, Defense-wide activities for the National Guard Youth Challenge program.

The committee is aware that budget constraints have resulted in a waiting list of 15 States that wish to establish new Challenge academies, and eight States seek to establish additional academies. The committee is also concerned that existing Challenge academies have been forced to cut back on teachers, student uniforms, and educational activities because of steady per-student funding since the program's inception. The committee urges the Department of Defense to use additional funding authorized in this bill to address reductions at existing academies while expanding the program to new sites.

**Items of Special Interest**

**Amputees returning to active-duty military service**

The committee is encouraged to learn that recent improvements in amputee care and rehabilitation have resulted in a significantly higher probability that military members who have been severely injured as a result of combat wounds may be found fit for full duty and able to continue in active military service. The courage and determination shown by so many amputees and those who have suffered grave injuries in combat provides inspiration to all service members. Those active members who are motivated to remain in military service and meet physical standards for the performance of military duty should be encouraged and authorized to continue their military service. The committee directs the Department of Defense to review existing policies and procedures controlling the determination by service physical evaluation boards to ensure that advances in the treatment of disabling conditions result in the best decision making regarding continued service of combat veterans.

**Joint professional military education and designation of Reserve officers**

The committee strongly supports the efforts of the Department of Defense, the Joint Staff, and the services to establish policies for Reserve officers that ensure opportunities for joint professional

military education and professional growth. The committee endorses the Department's policy of requiring the services to fill joint duty assignments for reserve officers with the highest caliber officers who have shown the highest potential for responsibility and performance and to develop a cadre of officers with joint education and experience. Joint learning objectives must be incorporated into Reserve component joint officer management, and the Advanced Joint Professional Military Education (AJPME) course for Reserve officers provides an excellent means to evaluate how to accomplish this goal.

The committee urges the Department to accelerate, to the maximum extent possible, its evaluation of the AJPME for accreditation and expand the JPME phase II opportunity for both Active and Reserve component officers.

The committee notes that the term joint specialty officer has not been applied to members of the Reserve component. While designation of officers in the Reserve as "fully joint qualified" conveys the achievement of qualifications similar to those of joint specialty officers, the reasons for this differentiation between Active and Reserve officers are not compelling. The committee directs the Secretary of Defense to submit a report by December 1, 2004, evaluating whether the term joint specialty officer should be used in the Reserve component joint officer management program, and discussing legislative and regulatory changes necessary to accomplish this goal.

### **Space cadre**

The committee notes that the Secretary of Defense, pursuant to the requirement in section 547 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-87), submitted to the Committees on Armed Services of the Senate and the House of Representatives a human capital resources strategy for space personnel of the Department of the Defense. The committee believes the strategy constitutes an important first step in coordinating and integrating the efforts of the military services to develop an effective space cadre. The committee understands that the services, particularly the Air Force, Navy, and Marine Corps, appear to be making some progress in identifying space billets and officers with space backgrounds, and in inter-service coordination related to space education. The committee expects that progress in these areas will continue, and that efforts to identify enlisted and civilian personnel with space expertise will be expanded.

The committee notes, however, that the implementation plan for the strategy lacks detail. The committee understands that the Department has not established Department-wide criteria for inclusion of personnel in a space cadre. The committee believes that commonality of definition, in addition to common training and certification standards, will be important in the future to avoid service space personnel "stovepipes" in which space personnel are not defined, trained, and certified in a consistent manner across the services.

The committee also notes that the Air Force has been developing detailed career planning guidance for space professionals for nearly three years, but has not yet completed this guidance. The com-

mittee recognizes that this task has been complicated by a number of factors, but believes that finalizing such guidance is important.

In light of these considerations, the committee directs the Secretary of Defense to develop a detailed plan to implement the human capital resources strategy for space personnel and to provide to the Committees on Armed Services of the Senate and the House of Representatives a report on that plan no later than November 15, 2004. The plan should include: specific goals and metrics; a schedule for achieving the goals; and a path forward toward achieving a common definition, and training and certification standards for the space cadre of the military services. The committee further directs the Secretary of the Air Force to submit to the Committees on Armed Services of the Senate and the House of Representatives no later than February 15, 2005, the detailed career planning guidance for the Air Force space cadre.





## **TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS**

### **Subtitle A—Pay and Allowances**

#### **Geographic basis for housing allowance during short-assignment permanent changes of station for education or training (sec. 601)**

The committee recommends a provision that would allow members who receive orders within the continental United States to attend professional military education or training classes for a period of not more than one year to receive basic allowance for housing (BAH) in an amount based on the area of their new duty location or the area of their last duty station, if that is where their dependents reside. This provision will prevent a reduction in BAH for military members in situations, for example, in which they are assigned to professional schools of relatively short duration and elect to leave their dependents at the location of their prior duty station. The committee supports home basing efforts by the services and believes this provision will help in reducing the numbers of expensive permanent change of station moves.

#### **Immediate lump sum reimbursement for unusual non-recurring expenses incurred for duty outside the continental United States (sec. 602)**

The committee recommends a provision that would modify section 405 of title 37, United States Code, to authorize reimbursement for certain actual expenses incurred incident to service outside the United States. In some overseas locations, upon arriving, members incur unusual expenses (e.g., taxes and registration fees). Under current law, members who must pay these costs receive reimbursement using a formula that identifies the expected average annual costs of these unusual expenses, prorates the cost to a daily average, and then adds the daily average to normal daily pay. This section would authorize an immediate lump sum payment covering the full amount of the unusual expenses. The nonrecurring expenses, which may be reimbursed, are those directly related to the conditions or location of the assignment either of a nature or a magnitude not normally incurred by members assigned in the United States, and not included in overseas per diem. The committee believes this lump sum reimbursement is an equitable way to address this problem related to overseas duty.

#### **Permanent increase in authorized amount of family separation allowance (sec. 603)**

The committee recommends a provision that would modify section 427 of title 37, United States Code, to make permanent the in-

crease in family separation allowance from \$100 per month to \$250 per month.

Last year, in the Emergency Wartime Supplemental Appropriations Act for Fiscal Year 2003 (Public Law 108–11), an increase in the family separation allowance from \$100 to \$250 per month, retroactive to October 1, 2002, was approved. In section 606 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136), this increase was extended from October 1, 2003, through December 31, 2004.

The committee believes that a permanent increase in the family separation allowance, which is paid to members who have dependents, who are deployed away from their home base for more than 30 continuous days, is justified. This allowance provides an essential source of funds to families of deployed service members for increased costs brought about by military deployments and separations.

#### **Subtitle B—Bonuses and Special and Incentive Pays**

##### **One-year extension of certain bonus and special pay authorities for reserve forces (sec. 611)**

The committee recommends a provision that would extend for one-year the authority to pay the Selected Reserve reenlistment bonus, the Selected Reserve enlistment bonus, the special pay for enlisted members assigned to certain high priority units in the Selected Reserve, the Selected Reserve affiliation bonus, the Ready Reserve enlistment and reenlistment bonus, and the prior service enlistment bonus.

##### **One-year extension of certain bonus and special pay authorities for certain health care professionals (sec. 612)**

The committee recommends a provision that would extend for one-year the authority to pay the nurse officer candidate accession bonus, the accession bonus for registered nurses, incentive special pay for nurse anesthetists, special pay for Selected Reserve health professionals in critically short wartime specialties, the accession bonus for dental officers, and to repay education loans for certain Selected Reserve health professionals.

##### **One-year extension of special pay and bonus authorities for nuclear officers (sec. 613)**

The committee recommends a provision that would extend for one-year the authority to pay the special pay for nuclear-qualified officers extending their period of active service, the nuclear career accession bonus, and the nuclear career annual incentive bonus.

##### **One-year extension of other bonus and special pay authorities (sec. 614)**

The committee recommends a provision that would extend for one-year the authority to pay the aviation officer retention bonus, assignment incentive pay, the reenlistment bonus for active members, the enlistment bonus for active members, the retention bonus for members with critical military skills, and the accession bonus for new officers in critical military skills.

**Reduced service obligation for nurses receiving nurse accession bonus (sec. 615)**

The committee recommends a provision that would reduce the period of obligated service from four years to three for registered nurses who receive an accession bonus. The committee recognizes that a national shortage of qualified nurses impacts military recruitment and retention. The Air Force, for example, has failed to meet its nurse recruitment goals for four consecutive years. The committee is aware that the military must compete with private hospitals offering large incentive payments, in addition to tuition bonuses, as sign-on bonuses for nurses in critically short supply. The committee believes that reducing the service obligation, coupled with other recruitment initiatives of the services, will assist in accessing qualified military nurses to support the military medical mission.

**Assignment incentive pay (sec. 616)**

The committee recommends a provision that would prohibit members on terminal leave from receiving assignment incentive pay under section 307a of title 37, United States Code. This provision clarifies that assignment incentive pay is intended only for members who are performing service in a designated assignment, including members on authorized leave, but not those members whose leave ends upon their discharge or release from active duty.

The provision would also delete the requirement in statute for a written agreement between the Secretary concerned and the member, concurred in by the Secretary of Defense. The committee believes that assignment incentive pay should not only be a highly flexible means of providing an incentive to members to volunteer for challenging assignments, but also a means for service secretaries, on a discretionary basis when mission accomplishment so requires, to compensate members who are called on to extend their service or otherwise serve in demanding assignments. The requirement for a written agreement does not serve this purpose and should not be mandatory in every case.

The committee understands that the Department of Defense has authorized payment of assignment incentive pay to eligible military personnel whose tours of duty in Iraq have recently been extended beyond 12 months. The committee commends the Department for taking this initiative in recognition of the ongoing sacrifices being made by service members and their families in response to mission critical requirements.

**Permanent increase in authorized amount of hostile fire and imminent danger special pay (sec. 617)**

The committee recommends a provision that would modify section 310 of title 37, United States Code, to make permanent the increase in special pay for duty subject to hostile fire or imminent danger from \$150 per month to \$225 per month.

Last year, in the Emergency Wartime Supplemental Appropriations Act for Fiscal Year 2003 (Public Law 108–11), an increase in the special pay for duty subject to hostile fire or imminent danger from \$150 to \$225 per month, retroactive to October 1, 2002, was approved. In section 619 of the National Defense Authorization Act

for Fiscal Year 2004 (Public Law 108–136) this increase was extended from October 1, 2003, through December 31, 2004. The committee believes that a permanent increase in the monthly amount of special pay for duty subject to hostile fire or imminent danger is fully justified given the criteria for eligibility for this special pay and the sacrifices borne by members of the Armed Forces and their families.

**Eligibility of enlisted members to qualify for critical skills retention bonus while serving on indefinite reenlistment (sec. 618)**

The committee recommends a provision that would authorize enlisted personnel serving on indefinite reenlistments in designated critical military skills to receive a critical skills retention bonus under section 323 of title 37, United States Code, on the condition that they enter into a written agreement to remain on active duty for at least one year under such enlistment. This section clarifies that enlisted personnel serving in indefinite enlistments are subject to the same eligibility and terms for the critical skills retention bonus as those members serving for definite terms of service.

**Clarification of educational pursuits qualifying for Selected Reserve education loan repayment program for health professions officers (sec. 619)**

The committee recommends a provision that would clarify that repayment of educational loans for health professions officers of the Selected Reserve, whose skills are needed to meet wartime combat skill shortages, may be made for members pursuing a basic professional qualifying degree or graduate education. The committee believes that this clarification will further strengthen the health professions loan program as a tool to recruit and retain officers trained in medical skills needed in wartime, and who are in short supply in the Reserve components.

**Bonus for certain initial service of commissioned officers in the Selected Reserve (sec. 620)**

The committee recommends a provision that would authorize an affiliation or accession bonus of up to \$6,000 for certain commissioned officers in the Selected Reserve. This provision would allow the Reserve components to address critical skill shortages in such areas as languages or civil affairs by encouraging individuals who are already trained, proven performers to continue serving by affiliating with a Reserve component. The provision would also help to access individuals who possess, or would train in, a critical skill to serve as commissioned officers in the Selected Reserve.

**Subtitle C—Travel and Transportation Allowances**

**Travel and transportation allowances for family members to attend burial ceremonies of members who die on duty (sec. 631)**

The committee recommends a provision that would modify section 411f of title 37, United States Code, to authorize the Secretary concerned to pay for the travel of certain family members to any

location, not just to locations in the United States, Puerto Rico, and the possessions of the United States, selected by the person designated to direct disposition of the remains of a deceased member of the Armed Forces.

**Lodging costs incurred in connection with dependent student travel (sec. 632)**

The committee recommends a provision that would amend section 430 of title 37, United States Code, to authorize reimbursement for certain lodging costs of student dependents of military members assigned outside the United States. Such costs would have to be incurred by the student during annual travel between the school being attended and the member's duty station and would have to be necessitated by an interruption in the travel caused by extraordinary circumstances.

**Subtitle D—Retired Pay and Survivor Benefits**

**Special rule for computing the high-36 month average for disabled members of Reserve components (sec. 641)**

The committee recommends a provision that would modify the rules under section 1407 of Title 10, United States Code, affecting the computation of retirement pay and survivor annuities for Reserve component members who are entitled to retired pay for physical disability under sections 1201 or 1202 of Title 10, United States Code.

Under current law, retirement pay and survivor annuities are calculated using the high-36 month average of monthly basic pay out of all the months of a member's active service. Because of the periodic nature of Reserve service, unless the member was activated for an extended period, the calculation of the high-36 month average must include service performed very early in the member's military career. This section would permit more equitable treatment of certain Reserve component members by calculating the average as if they had been entitled to basic pay for the 36 months preceding their retirement, regardless of whether the member served the entire period on active duty.

Under this section, the effective date for determining the survivor benefit annuity would be September 10, 2001, the effective date of section 642 of the National Defense Authorization Act for Fiscal Year 2002, which authorized this benefit. For Reserve component members retiring for physical disability under section 1201 or 1202 of title 10, United States Code, the effective date would be the date of enactment of this section.

**Subtitle E—Other Matters**

**Increased maximum period for educational leave of absence for pursuit of a program of education in a health care profession (sec. 651)**

The committee recommends a provision that would extend from two to three years the period of time that a military member may take educational leave for a health care profession education program. The committee recognizes that medical professions may re-

quire three year educational programs, and that accommodating that unique need will assist in professional growth and retention of needed military health professionals.

**Eligibility of members for reimbursement of expenses incurred for adoption placements made by foreign governments (sec. 652)**

The committee recommends a provision that would amend section 1052(g) of title 10, United States Code, to include within the definition of "qualified adoption agency" a foreign government or an agency authorized by a foreign government to place children for adoption. Section 1052 authorizes reimbursement of expenses for certain members of the armed forces who adopt children. Although the statute includes intercountry adoptions, the definition of "qualified adoption expenses" does not include either foreign governments or agencies authorized by such governments to place children. Otherwise eligible members, who adopt children while on duty outside the United States, have been forced to readopt them through a domestic agency upon their return to the United States in order to be reimbursed. This provision would authorize reimbursement of expenses for such overseas adoptions, if the child is either eligible for automatic United States citizenship or has been issued a certificate of citizenship under the Immigration and Nationality Act.

The committee expects that the Secretary of Defense will make the necessary adjustments, including extending the period allowed under regulations for filing for reimbursement, to accommodate members who are abroad under military orders.

## **TITLE VII—HEALTH CARE**

### **Subtitle A—Enhanced Benefits for Reserves**

The committee commends the contributions of members of the Reserve and National Guard in Operation Enduring Freedom and Operation Iraqi Freedom. As fully integrated members of military forces in both combat and support roles, members of the Reserve components have performed superbly; many have paid the ultimate price in defense of freedom. The committee also commends the sacrifices and support of the families of reserve members who have been called to active service in support of the nation's security.

The committee is disappointed that the Secretary has failed to fully implement provisions contained in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) to provide enhanced health care benefits for members of the Reserve components. The committee recommends a series of health care provisions to achieve this goal.

#### **Demonstration project on health benefits for Reserves (sec. 701)**

The committee directs the Secretary of Defense to carry out a pilot program under section 1092, title 10, United States Code, as amended, to determine the need for, and feasibility of, providing benefits under TRICARE to members of the Ready Reserve who are: (1) eligible for unemployment compensation, (2) continuously unemployed after the expiration of such compensation, or (3) ineligible for employer-provided health care coverage.

The committee expects the Secretary to establish premiums for such benefits in which the reserve member would pay 28 percent of the cost of coverage. The committee intends that the Secretary should not limit the geographic scope of the pilot program, but may prescribe other criteria that the Secretary considers appropriate for providing an informed basis as to implementing the program. The committee directs that the cost of the pilot program not exceed \$200.0 million in any fiscal year. The pilot program should commence not later than March 1, 2005, for a period of two years, and should incorporate steps taken to implement section 702 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–360). The committee directs that at the conclusion of the pilot program, and not later than March 1, 2007, the Secretary submit a report to the Committees on Armed Services of the Senate and the House of Representatives on the results of the pilot program, to include any draft legislation that the Secretary recommends.

**Permanent earlier eligibility date for TRICARE benefits for members of Reserve components (sec. 702)**

The committee recommends a provision that would make permanent the authority provided in section 703 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) for earlier eligibility for TRICARE benefits for members of the Reserve components. The provision would authorize eligibility for care on the date of the issuance of a delayed-effective date active duty order or 90 days before the date on which the period of active duty commences, whichever is later, for Reserve component members called to active duty for a period of more than 30 days in support of a contingency. The committee is concerned that Reserve components are experiencing difficulty in timely notification to members of orders to active duty, and directs the Secretary of Defense to evaluate such difficulties and report by March 1, 2005, on steps needed to ensure timely notification to Reserve component members being called to active duty for a period of more than 30 days in support of a contingency operation.

**Waiver of certain deductibles for members on active duty for a period of more than 30 days (sec. 703)**

The committee recommends a provision that would allow the Secretary of Defense to waive TRICARE deductibles for members of Reserve components called to Active-Duty for more than 30 days. The provision would ensure that mobilized Reserve component members would not incur more than one deductible payment as they transition from private health insurance to TRICARE after receipt of an Active-Duty order.

**Protection of dependents from balance billing (sec. 704)**

The committee recommends a provision that would authorize the Secretary of Defense to pay 15 percent above the maximum payment allowable under TRICARE for health care services for family members of a reserve member ordered to Active-Duty to ensure continuity of health care services when making the transition from employer-provided insurance to TRICARE. This provision would protect reservists from additional billing by civilian health care providers in excess of the authorized TRICARE payment in the event that a civilian provider with whom the family member has an existing relationship does not accept TRICARE's payment as payment in full, and would reduce financial hardship for reservists called to Active-Duty.

**Permanent extension of transitional health care benefits and addition of requirement for preseparation physical examination (sec. 705)**

The committee recommends a provision that would make permanent the authority provided in section 704 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) authorizing 180 days of transitional health care coverage for certain active and reserve members eligible for transitional health care benefits under section 1145, title 10, United States Code. The provision would require that as part of such transitional health care coverage, each member shall undergo a comprehensive physical ex-



amination before separating from Active-Duty service. The committee expects the Secretary of Defense to evaluate and retain in official records the results of each physical examination of a member separating from Active-Duty service.

**Permanent elective coverage for ready Reserve members under TRICARE program (sec. 706)**

The committee recommends a provision that would require the Secretary of Defense to establish a program offering permanent elective coverage for Selected Reserve members under TRICARE. This program, which would be known as TRICARE Reserve Select, would be a new premium based option, under which TRICARE Standard would be available to any member of the Selected Reserve while in a non-active status, and the member's family, based on premium payments determined by the Secretary. Such payments would be shared by the member, who would pay 28 percent and the member's employer, which would pay 72 percent; or if the member is not employed or does not have access to employer-provided health care coverage, the member would pay 100 percent. The premium payments would fully cover the cost of health benefits delivered under TRICARE while in a Non-Active-Duty status. When the member is called to Active-Duty for a period of more than 30 days, the member is eligible for TRICARE as an Active-Duty member. The committee expects that members who elect coverage under TRICARE Reserve Select may decide to use preferred civilian network providers, thus becoming eligible for TRICARE Extra, which reduces beneficiary cost sharing by five percent.

The provision would require the establishment of a TRICARE Reserve Select Advisory Committee, chaired by an official appointed by the Secretary, and comprised of representatives of the Defense Advisory Board for Employer Support for the Guard and Reserve, the Office of Personnel Management, and TRICARE Regional Directors. The committee expects that the Advisory Committee would interact with employers of members of the Reserve components to inform them of the availability of the TRICARE Reserve Select Option and also would advise the Secretary on implementation of the program. The committee also expects that TRICARE Beneficiary Counseling and Assistance Coordinators for Reserve component beneficiaries established in section 707 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136) would be involved in providing education and assistance to reserve members enrolling in this option.

The committee believes that the establishment of such a program would provide continuity of coverage and benefits when members move from a Non-Active to Active-Duty status for any participating member and member's family. It would ease transition if the member is ordered to Active-Duty for more than 30 days and thus becomes eligible for TRICARE as an Active-Duty member of the Armed Forces. The provision would result in savings to employers who have sustained private insurance coverage while the member is on extended periods of Active-Duty and alleviate the burden of health care transition for the reserve member.

The committee believes that for many employers of members of the guard and reserve, such a program could be an attractive alter-

native to private coverage which is experiencing significant annual cost growth and increases in out of pocket expenditures for beneficiaries. The committee expects the Federal Government, which is the largest single employer of members of the guard and reserve, to lead the way in making TRICARE Reserve Select coverage available as an option to Federal employees.

The committee directs that the Secretary report not later than 90 days after the date of enactment of the bill on plans for implementing TRICARE Reserve Select.

### **Subtitle B—Other Matters**

#### **Repeal of requirement for payment of subsistence charges while hospitalized (sec. 711)**

The committee recommends a provision that would repeal section 1075 of title 10, United States Code, thereby eliminating the requirement that officers and certain enlisted personnel, who are hospitalized in military treatment facilities, pay for their subsistence for the duration of their hospitalization.

#### **Opportunity for young child dependent of deceased member to become eligible for enrollment in a TRICARE dental plan (sec. 712)**

The committee recommends a provision that would extend eligibility to enroll in the TRICARE dental insurance plan authorized in section 1076a of title 10, United States Code, to the young child survivor of a military member who died while on Active-Duty in cases where the child was too young to enroll at the time of the member's death. This provision would ensure that any child who was under the age of three at the time of the member's death would be entitled to the three year survivor benefit when they become of age for enrollment.

#### **Pediatric dental practice necessary for professional accreditation (sec. 713)**

The committee recommends a provision that would authorize a limited number of military dependents under the age of 12 to receive dental treatment by postgraduate dental students in a dental treatment facility of the uniformed services when such treatment is necessary to satisfy an accreditation standard of the American Dental Association for professional qualification of dental officers. Specialized training in oral and maxillofacial surgery as well as orthodontics is limited to seven uniformed services dental training facilities, and involves less than 2,000 military dependents under the age of 12 per year. The committee recommends authorization of care for up to 2,000 military dependents under the age of 12 for this purpose.

#### **Services of marriage and family therapists (sec. 714)**

The committee recommends a provision that would clarify the authority of certified marriage and family therapists to serve as health care professionals to provide health care under sections 1091 and 1094 of title 10, United States Code.

**Chiropractic health care benefits advisory committee (sec. 715)**

The committee recommends a provision that would require the Secretary of Defense to establish a chiropractic health care benefits advisory committee to provide advice and recommendations regarding the continued development and implementation of chiropractic health care benefits for members of the uniformed services on Active-Duty. The committee believes that it is in the best interests of Active Duty members, who will have access to new chiropractic benefits from the Department of Defense, to have an established means of regular communication with expert representatives of the chiropractic care community. The committee expects that the advisory committee will meet no fewer than three times in each fiscal year beginning in fiscal year 2005.

**Grounds for presidential waiver of requirement for informed consent or option to refuse regarding administration of drugs not approved for general use (sec. 716)**

The committee recommends a provision that would specify that national security interests are the sole condition under which the president may grant a waiver of informed consent under section 1107, title 10, United States Code, or option to refuse administration of a drug under an emergency use authorization under section 1107(a), title 10, United States Code.

**Items of Special Interest**

**Access to network pharmacies for nursing home patients**

The committee is concerned that the Department of Defense is unresponsive to the concerns of beneficiaries in nursing homes who may not have access to network pharmacies, and as a result must pay deductibles for use of non network pharmacy services. The committee directs the Secretary to develop a means of handling such claims to ensure that beneficiaries in nursing homes are aware of alternatives to the use of non network pharmacies so they can avoid incurring deductible costs.

**Armed Forces Institute of Pathology**

The Committee acknowledges the significant role that the Armed Forces Institute of Pathology has played both within the military and as a national asset within the global pathology community. A number of recent studies have recommended ways to modernize and transform certain business practices, including options for the future of the institute. The committee is concerned that a recently developed business plan, which seeks to effect needed improvements, could have unintended effects on the effectiveness and prestige of the institute. The committee directs the Comptroller General to evaluate the Armed Forces Institute of Pathology business plan, and to provide a report to the committee by March 1, 2005, which contains an assessment of the potential of the business plan to achieve improvements; an assessment of changes needed, if any, to the institute's operations; and recommendations for legislative proposals to ensure a strong future for the Armed Forces Institute of Pathology.

**Continuation of health care management demonstration**

The committee supports ongoing efforts to demonstrate the utility of advanced modeling and simulation tools to optimize the management of resources within the Department of Defense's health care system. The committee encourages the Secretary of Defense to continue these efforts, building upon recent experience in the application of such tools in TRICARE Region 11 and the Wilford Hall Medical Center in San Antonio, Texas. The committee believes that such tools will assist in both strategic and operational decisions for the military health care system.

**Feasibility of joint medical command, U.S. Forces Korea**

The relocation of U.S. military forces and the potential increase in command sponsored family members in the Republic of Korea presents a challenge for effective delivery of health care services to military members and their families. It is critical that military medical resources be assigned in the most effective manner according to valid health care requirements, irrespective of service affiliation of the member or military installation. The committee is aware that at some military locations needed medical services are in short supply, for example, same day access to appointments for Active-Duty members and availability of obstetrical care. The committee believes that joint planning of military medical support on the Korean peninsula would achieve more effective health care services delivery. Accordingly, the committee directs the Secretary of Defense, in conjunction with the Chairman, Joint Chiefs of Staff, to conduct a study of the feasibility of establishing a joint military medical command in support of U.S. Forces Korea. Such a plan should include health planning and assignment of military medical personnel needed in peacetime, transition to wartime support of joint tactical operations, and, wherever feasible, maximum use of civilian medical assets which have been certified for quality care by local military medical personnel. The committee directs that such report be provided to the Committees on Armed Services of the Senate and the House of Representatives by June 1, 2005.

**Suicides**

The committee is concerned about the suicide rate among soldiers serving in Operation Iraqi Freedom. The suicide rate of 17.3 per 100,000 soldiers for calendar year 2003 is higher than the Army average of 12.8 per 100,000 soldiers for the same period, and is higher than the Army historical average of 11.9 per 100,000 soldiers.

The committee is encouraged by the Army Surgeon General's initiative to conduct an unprecedented behavioral health study of soldiers in a combat environment. Not surprisingly, the Operation Iraqi Freedom Mental Health Advisory Team reported that soldiers in Iraq reported multiple combat and operational stress factors. One of the most disconcerting findings was that although soldiers wanted help, they perceived barriers to obtaining mental health assistance.

The Mental Health Advisory Team report includes a number of valuable recommendations to improve the behavioral health system in the Iraqi theater. The committee encourages all services to care-

fully consider implementing these recommendations in the Iraqi theater, and in other areas where implementation will contribute to the mental well-being of service members serving in stressful situations.

The committee directs the service secretaries to report to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2005, on actions taken to improve mental health support in combat theaters.

#### **TRICARE transition and implementation of new contracts**

As the Department of Defense embarks upon the transition to new TRICARE contracts and institutes new business practices to improve beneficiary satisfaction, access to care and efficiency of military treatment facilities, the committee expects that the highest priority will be given to a smooth and seamless transition for military members, and retirees, and their families, including members of the Reserve and National Guard, and their families. Careful attention must be paid to ensure that “carve-outs” of functions such as appointing and resource sharing, which are key to access to health care, do not result in disruption of services to military personnel and their families.

The committee commends the Secretary of Defense for the successful award of new contracts to support the TRICARE program and applauds the spirit of collaboration among incumbent contractors committed to ensuring a smooth transition to an improved TRICARE program. The committee expects that the Secretary will continue to recognize and involve representatives of beneficiary organizations throughout the process of transition and implementation of an improved TRICARE program.

The committee directs the Comptroller General (U.S.) to monitor the transition to the new governance structure and contracts supporting the TRICARE program, and to submit a report to the Committees on Armed Services of the Senate and the House of Representatives, which contains an assessment of initial transition activities by May 1, 2005.

The committee also directs the Comptroller General (U.S.) to evaluate the effectiveness of the new contracts, when operational, in achieving the goals of the Secretary to improve and transform the TRICARE program. Specifically, the committee directs the Comptroller General (U.S.) to evaluate:

- (1) the effectiveness of the new governance structure in streamlining management, enhancing efficiency, productivity and customer satisfaction;
- (2) the degree to which medical commanders exercise increased responsibility and accountability for health care delivery for local health care service markets and the effects of such increased responsibility and accountability;
- (3) the effectiveness of the annual health care business plan in establishing management objectives and the success of local managers in achieving those objectives;
- (4) improvements in provider participation, which are attributable to new TRICARE governance and contracts;
- (5) the degree of simplicity of contract administration in the new contracts;

(6) the effectiveness of “carve-outs” of key functions including, but not limited to, appointing, resource sharing, pharmacy services, claims processing for medicare eligibles, and marketing, in improving quality and customer satisfaction;

(7) improved beneficiary satisfaction;

(8) improved pharmacy management; and

(9) improvements in TRICARE Standard.

The Committee directs the Comptroller General (U.S.) to present a report to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2005 outlining a plan to conduct the evaluation of the effectiveness of the new TRICARE program.

## **TITLE VIII—ACQUISITION POLICY, ACQUISITION MANAGEMENT, AND RELATED MATTERS**

### **Subtitle A—Acquisition Policy and Management**

#### **Responsibilities of acquisition executives and chief information officers under the Clinger-Cohen Act (sec. 801)**

The committee recommends a provision that would clarify responsibility within the Department of Defense for applying the requirements of the Clinger-Cohen Act (as codified in chapter 113 of title 40, United States Code) to equipment determined by the Secretary of Defense to be an integral part of a weapon or weapon system. This provision would provide senior acquisition officials in the Department of Defense the flexibility to establish effective information technology management policies and to alter these policies as necessary to take advantage of rapidly changing information technologies in weapons and weapon systems.

Under this provision, Clinger-Cohen Act requirements for capital planning, investment control, and performance and results-based management processes would continue to apply to weapons and weapon systems. However, these requirements would be administered by the senior acquisition executives of the three military services, overseen by a board of senior acquisition officials. The board would be chaired by the Under Secretary of Defense for Acquisition, Technology and Logistics, and would include the three service acquisition executives and the Chief Information Officer (CIO).

The provision would recognize that the Under Secretary of Defense for Acquisition, Technology, and Logistics and the service acquisition executives, with overall responsibility for the acquisition of weapons and weapon systems, are best able to develop and implement information technology policies for such weapons and weapon systems. The CIO would be included on the board to ensure that the policies implemented by the board are consistent with the Department's overall approach to information technology issues. In addition to implementing responsibilities under the Clinger-Cohen Act, the board would be responsible for ensuring effective spectrum availability, interoperability, information security, evolutionary and spiral development, and implementation of software development policies and practices for information technology integral to weapon systems.

#### **Software-related program costs under major defense acquisition programs (sec. 802)**

The committee recommends a provision that would modify existing quarterly acquisition reports submitted to Congress by the Secretary of Defense to include information on significant changes in

the cost, schedule, or performance of the computer software component of each major defense acquisition program (MDAP).

The committee notes that the General Accounting Office (GAO) report entitled “Stronger Management Practices Are Needed to Improve DOD’s Software-Intensive Weapon Acquisitions”, dated March 2004, concludes that software has become a critical component of Department of Defense’s weapon systems, and that in fiscal year 2003 alone, the Department might have spent as much as \$8.0 billion to rework software because of quality-related issues. The committee also notes that many MDAPs, including the F-22 fighter jet, the Space-based Infrared Satellite System, and the Comanche helicopter have experienced significant cost overruns and schedule slips where software problems were a contributing factor. The GAO report recommends that the Secretary adopt controls to improve software acquisition outcomes, including the collection of software-related cost data. The committee concurs with the GAO recommendation, and believes that such software-related cost data also should be provided to Congress to enable more informed oversight of critical national defense activities.

**Internal controls for Department of Defense purchases through GSA Client Support Centers (sec. 803)**

The committee recommends a provision that would prohibit Department of Defense officials from placing orders in excess of \$100,000 through a Client Support Center (CSC) of the Federal Technology Service of the General Services Administration (GSA) until the Department Inspector General (IG) in consultation with the GSA Inspector General determines that the CSC has in place the policies, procedures, and internal controls necessary to ensure compliance with requirements of law and regulation.

**On January 8, 2004, the GSA IG reported a pervasive problem of improper task order and contract awards by the CSC’s. The GSA IG reported that:**

In making these awards, CSC officials breached Government procurement laws and regulations, and on a number of occasions, processed procurement transactions for goods and services through the Information Technology Fund that were well outside the fund’s legislatively authorized purposes. Inappropriate contracting practices included: improper sole source awards, misuse of small business contracts, allowing work outside the contract scope, improper order modifications, frequent inappropriate use of time and materials task orders, and not enforcing contract provisions. Although their authority is restricted to acquiring information technology equipment, software and related services, we identified CSCs making procurements for such things as: floating marine barriers; construction of classrooms and office buildings; and pathogen detection devices and services. In making several of these awards, millions of dollars were wasted by compensating the contractors for doing little more than placing orders with other favored contractors to do the actual work. Competition, or other-



wise permitting vendors a fair opportunity to be considered, was absent from many of the transactions examined.

The GSA IG attributed these problems to an ineffective system of internal management controls and a culture that has emphasized revenue growth over adherence to proper procurement procedures. Because orders from Department customers provided 85 percent of the CSC's \$5.8 billion of revenues in fiscal year 2003, the committee recommends a provision that would prohibit Department officials from placing additional orders until these problems have been addressed.

**Defense commercial satellite services procurement process (sec. 804)**

The committee recommends a provision that would require the Secretary of Defense to review alternative mechanisms for procuring commercial satellite services, and provide guidance to the Director of the Defense Information Services Agency and the secretaries of the military departments on how such procurements should be conducted.

**Subtitle B—General Contracting Authorities, Procedures, and Limitations, and Other Matters**

**Increased thresholds for applicability of certain requirements (sec. 811)**

The committee recommends a provision that would: (1) raise from \$50.0 million to \$75.0 million the threshold in section 2304(f)(1)(B)(iii), title 10, United States Code, for requiring approval of the senior procurement executive of an agency to award contracts under other than competitive procedures; and (2) increase from \$500,000 to \$1.0 million the threshold in section 2416(d), title 10, United States Code, at which contractors must provide to cooperative agreement holders a listing of the names and contact information of each contractor employee who has authority to enter into contracts, including subcontracts. The new thresholds are designed to ease administrative burdens, while adjusting the originally enacted thresholds for inflation.

**Period for multiyear task and delivery order contract (sec. 812)**

The committee recommends a provision that would amend section 2304a(f) of title 10, United States Code, to clarify that the limitation of the period of time for which task and delivery order contracts may be awarded does not cover options. The provision limits the award of options to no more than three years, unless the head of an agency determines in writing that exceptional circumstances necessitate a longer contract period.

**Submission of cost or pricing data on noncommercial modifications of commercial items (sec. 813)**

The committee recommends a provision that would require contractors to submit cost or pricing data on noncommercial modifications to commercial items.

The Department of Defense Inspector General's (IG) March 29, 2004 report, "Acquisition of the Boeing KC-767A Tanker Aircraft," (D-2004-064) states that less than one-third of the dollar value of the contract negotiated by the Air Force was for the "green" commercial aircraft, with the balance covering development costs, non-commercial modifications, logistics support, training, and lease costs. The IG concluded that the noncommercial modifications to the aircraft (including development costs) were so extensive that the program did not meet the statutory definition of a commercial item.

The entire tanker lease program was treated as a commercial acquisition, leaving the Air Force without access to cost or pricing data even for development costs, noncommercial modifications, training, and logistics support. As a result, the IG found that the Air Force did not have the data that it needed to ensure that Boeing's prices were fair and reasonable. For example, the Air Force relied upon information provided to the Italian government to assess the reasonableness of development costs; relied upon the prices of unrelated modifications to other aircraft to assess the reasonableness of modification costs; and relied upon internal Air Force brochures from other aircraft programs to assess the reasonableness of logistics support costs.

The committee believes that the Department needs much better information to protect the interest of the taxpayers in assessing the price reasonableness of non commercial modifications to commercial items. Under the provision recommended by the committee, contractors would be required to provide cost or pricing data with regard to noncommercial modifications to commercial items, if the modifications are expected to cost in excess of \$500,000. This is the same information that the contractors would be required to provide if the modifications were acquired under separate contracts.

The provision recommended by the committee would not require the contractor to provide any additional information on the commercial part of the contract. Exceptions to the requirement to provide cost or pricing data based on adequate price competition or exceptional circumstances would remain unchanged.

**Delegations of authority to make determinations relating to payment of defense contractors for business restructuring costs (sec. 814)**

The committee recommends a provision that would permit the Secretary of Defense to delegate below the level of an Assistant Secretary of Defense the authority to pay defense contractors for restructuring costs associated with business combinations in cases where the amount of restructuring costs over a five year period is expected to be under \$25.0 million. In no case can this authority be delegated below the Director of the Defense Contract Management Agency.

**Limitation regarding service charges imposed for defense procurements made through contracts of other agencies (sec. 815)**

The committee recommends a provision that would prohibit the Department of Defense from paying more than a one percent serv-

ice charge for using other agency contracts to purchase goods and services. In fiscal year 2002, the Department of Defense purchased over \$12 billion of goods and services off of other U.S. government agency contracts. While most of these agencies charge the Department less than a one percent fee to use these contracts, the committee is concerned that the Department continues to pay up to six percent for the use of some of these contracts. In many cases, the personnel of other departments and agencies have considerably less expertise in procurement in general and in the specific products and services to be acquired, than Department personnel. The committee finds it unacceptable that the Department would pay an excessive fee to another government agency for a service that the Department is more qualified to provide.

### **Subtitle C—Extensions of Temporary Program Authorities**

#### **Extension of contract goal for small disadvantaged business and certain institutions of higher education (sec. 831)**

The committee recommends a provision that would extend section 2323 of title 10, United States Code, for three years. Section 2323 establishes a five percent goal for Department of Defense contracting with small disadvantaged businesses and certain institutions of higher education.

#### **Extension of mentor-protege program (sec. 832)**

The committee recommends a provision to extend for five years the pilot mentor-protege program established by section 831 of the National Defense Authorization Act for Fiscal Year 1991. The mentor-protege program provides incentives to major defense contractors to assist small disadvantaged businesses, woman-owned businesses, and qualified organizations employing the severely disabled to enhance their capabilities as contractors on Department of Defense contracts. The mentor-protege program does not guarantee contracts to qualified small businesses. Instead, it is designed to equip these businesses with the knowledge and expertise that they need to win such contracts on their own, in the competitive market place.

#### **Extension of test program for negotiation of comprehensive small business subcontracting plans (sec. 833)**

The committee recommends a provision that would extend for five years the test program for negotiation of comprehensive small business subcontracting plans established by section 834 of the National Defense Authorization Act for Fiscal Years 1990 and 1991. Under the test program, prime contractors may submit a plan designed to provide the maximum subcontracting opportunity for small, disadvantaged, and women-owned small business concerns that covers all anticipated contracts on a plant, division, or corporate basis, rather than for each Federal contract and subcontract of \$500,000 or more (\$1.0 million) in the case of construction contracts) awarded as required under section 8(d) of the Small Business Act.

**Extension of pilot program on sales of manufactured articles and services of certain Army industrial facilities (sec. 834)**

The committee recommends a provision that would extend for five years the pilot program for the sale of manufactured articles and services from Army industrial facilities enacted in the National Defense Authorization Act for Fiscal Year 1998 (Public Law 105–85). This program tests the efficiency and appropriateness of selling manufactured articles and services at Army facilities under the authority of section 4543, title 10, United States Code, without regard to the availability of the articles and services from U.S. commercial sources.

**Subtitle D—Industrial Base Matters**

**Commission on the future of the national technology and industrial base (sec. 841)**

The committee recommends a provision that would require the President to establish a commission to assess the future of the national technology and industrial base as defined by section 2500 of title 10, United States Code. The commission would study the issues associated with the future of the national technology and industrial base in the global economy, particularly in relationship to U.S. national security, and assess the future ability of the national technology and industrial base to meet the objectives set forth in section 2501 of title 10, United States Code.

In the committee's view, much of the disagreement over the current direction of policies for the national technology and industrial base serving national defense stems from the lack of a comprehensive understanding about what is taking place within the base especially at the lower tiers. The committee believes that such an analysis is necessary, but will require several years to complete to be meaningful as a foundation for future public policy.

The provision establishing the commission is intended to result in a detailed evaluation of the state of the base and a set of recommendations for the future, which is not limited by any narrow interest or point of view. The terms of reference for the commission should ensure that issues such as trade considerations, foreign policy, commercial technology access, program acquisition costs, and foreign source dependency are considered in a full and balanced fashion in the development of the commission's recommendations.

**Conforming standard for waiver of domestic source or content requirements (sec. 842)**

The committee recommends a provision that would provide the Secretary of Defense the authority to waive the application of statutory domestic source requirements and domestic content requirements, provided that: (1) the application of the requirements would impede the reciprocal procurement of defense items under a Memorandum of Understanding between the United States and another country; and (2) the other country does not discriminate against items produced in the United States to a greater degree than the United States discriminates against items produced in that country. The proposed waiver is identical to the standard previously

adopted by the Congress for products covered by the domestic content restrictions in section 2534 of title 10, United States Code.

**Consistency with United States obligations under trade agreements (sec. 843)**

The committee recommends a provision that would require that no provision of this Act, or any amendment made by this Act, shall apply if the Secretary of Defense, in consultation with the Secretary of Commerce, the U.S. Trade Representative, and the Secretary of State, determines that the application of the provision would be inconsistent with international trade agreements of the United States. An identical provision was included in the National Defense Authorization Act for Fiscal Year 2004.

**Subtitle E—Defense Acquisition and Support Workforce**

**Limitation and reinvestment authority relating to reduction of the defense acquisition and support workforce (sec. 851)**

The committee recommends a provision that would establish a moratorium on further cuts in the acquisition workforce for three years. The Secretary of Defense would be given the flexibility under this provision to realign positions in the acquisition workforce to reinvest in higher priority acquisition positions, and to increase the acquisition workforce by 15 percent. The provision would also require the Secretary of Defense to conduct a strategic assessment and develop a human resources strategic plan for the defense acquisition and support workforce.

More than a decade of downsizing has left the Department of Defense with a smaller workforce that is rapidly approaching retirement. Additional workforce reductions would increase the risk identified in a February 2000 report by the Department Inspector General (IG), “DOD Acquisition Workforce Reductions: Trends and Impacts”, which noted the following impacts from acquisition workforce reductions: (1) increased backlog in closing out contracts; (2) increased program costs due to contracted vice in-house technical support; (3) insufficient personnel to fill in for employees on deployment; (4) insufficient staff to manage requirements; (5) reduced scrutiny and timeliness in reviewing acquisition actions; (6) difficulty in retaining personnel; (7) skill imbalances; and (8) lost opportunities to develop cost saving initiatives. In addition, the Department IG, in the second Semiannual Report to the Congress for Fiscal Year 2002, states that reductions in personnel and funds are adversely affecting the Department’s quality assurance programs. In a May 2001 report, the IG concluded that shortages of staffing were one of the key factors leading to poor pricing analysis and the inappropriate use of waivers in a significant number of contracts.

As the Comptroller General pointed out in a May 2003 letter to the chairman of the Readiness and Management Support Subcommittee, Committee on Armed Services of the Senate, the Department’s contract management remains a high-risk area. The Comptroller General explained the linkage between the Department’s contracting problems and human capital issues as follows:

Between fiscal years 1990 and 2001, the [DOD] acquisition workforce was reduced significantly—by more than 50 percent. At the same time, DOD's contracting workload increased by 12 percent. As we reported last month, governmentwide reductions in the acquisition workforce along with a number of procurement reforms—including an increased reliance on services provided by commercial firms, changes to federal acquisition processes, and the introduction or expansion of alternative contracting approaches—have placed unprecedented demands on the federal acquisition workforce. Underlying these challenges is DOD's need to address serious imbalances in the skills of its remaining workforce and the potential loss of highly specialized knowledge as its procurement specialists retire.

**Defense acquisition workforce improvements (sec. 852)**

The committee recommends a provision to amend the Defense Acquisition Workforce Improvement Act (DAWIA), chapter 87 of title 10, United States Code to: 1) conform the provisions of DAWIA to the new National Security Personnel System; 2) reestablish the ability to recoup scholarship funds should a participant not fulfill the agreement; and 3) add the position of Deputy Program Manager to the list of critical acquisition positions for which the Secretary of Defense may establish different minimum standards.

**Subtitle F—Other Matters**

**Inapplicability of certain fiscal laws to settlements under special temporary contract closeout authority (sec. 861)**

The committee recommends a provision that would clarify the authority to settle financial accounts for old contracts that have unreconciled balances of less than \$100,000 under section 804 of the National Defense Authorization Act for Fiscal Year 2004.

Section 804 was intended to enable the Department of Defense to settle contracts in certain cases where the time and effort required to determine the cause of an out-of-balance condition is disproportionate to the amount of the discrepancy. Unfortunately, the Department has indicated that it is currently unable to use the authority of section 804 because of certain other requirements in title 31, United States Code, that continue to apply. The provision recommended by the committee would authorize the Secretary of Defense to waive certain provisions of title 31 for the purpose of settling financial accounts under section 804.

**Demonstration program on expanded use of Reserves to perform developmental testing, new equipment training, and related activities (sec. 862)**

The committee recommends a provision that would authorize the Secretary of the Army to carry out a demonstration program through September 2009 on the assignment of members of Reserve components to perform test, evaluation, and related activities for acquisition programs. Under this authority, funds available to the Army for an acquisition program may be transferred to a Reserve component military personnel account in the amount necessary to

reimburse that account for costs for military pay and allowances of reservists participating in this program.

Relying on soldiers to perform developmental testing could prove beneficial in providing soldier feedback earlier in the development cycle, enabling program managers to identify potential problems and required engineering changes sooner, reducing cost increases and fielding delays, and giving soldiers hands on experience in new and emerging systems.

Use of multiyear research, development, testing, and evaluation funds and procurement funds to reimburse the pay, allowances, and expenses of Reserve component members could prove to be a practical and efficient means to achieve the benefits of soldier involvement in testing and evaluation functions. Not more than \$10.0 million may be transferred under this provision during any fiscal year of the demonstration program.

**Applicability of competition exceptions to eligibility of National Guard for financial assistance for performance of additional duties (sec. 863)**

The committee recommends a provision that would clarify that exceptions to competition requirements provided in the Competition in Contracting Act, section 2304 of title 10, United States Code, apply to support activities provided by the Army National Guard under the authority of section 113(b) of title 32, United States Code.

**Management plan for contractor security personnel (sec. 864)**

The committee recommends a provision that would require the Secretary of Defense to develop policies and procedures for the management and oversight of contractor security personnel in areas where the Armed Forces are engaged in military operations.

The brutal murder of four private security contractors in Fallujah, Iraq at the end of March 2003 focused the nation's attention on the extraordinary risks faced by contractor employees in Iraq. It has been reported that as many as 50 civilian contractor employees have been killed in Iraq in the last year, with hundreds more wounded and some held hostage. The committee believes that the safety of American civilians, as well as the safety of civilians from other nations working in conjunction with the Coalition Provisional Authority (CPA), should be a high priority for coalition forces in Iraq.

At the same time, events in Iraq have raised concerns about the growing reliance of the CPA on private security contractors, not only to protect contractor activities, but to protect coalition facilities and critical military supplies. The committee understands that there are currently as many as 20,000 private security contractor employees in Iraq and that this number could more than triple over the next several months. In light of the growing threat to American civilians in Iraq and the role played by security contractors in addressing that threat, it is critical that security contractor employees be appropriately trained and vetted, adequately equipped and supported, knowledgeable of threat conditions, and provided with clear and enforceable rules of engagement.

The committee is also concerned by reports of the rising cost of providing contractor security in Iraq. The CPA Inspector General has stated security costs on contracts for the reconstruction of Iraq may now be running as high as 25 percent of the dollar value of the contracts. In addition, the committee understands that contractors are now paying from eight percent to 25 percent of their payroll for insurance. If these reports are true, the combined cost of security and insurance threaten to drain much of the funding intended for reconstruction of the country.

The provision recommended by the committee would address these issues by requiring the Secretary of Defense to develop and submit to Congress a plan for the management and oversight of contractor security personnel in areas of active military operations. The Secretary would be required to set forth policies and procedures applicable to contractor security personnel in potentially hazardous areas, the coordination of contractor security efforts with military activities, including appropriate sharing of information and emergency response measures, and any other matters he deems appropriate to adequately address prudent employment of contractor security elements in theaters of active military operations.

**Report on contractor performance of security, intelligence, law enforcement, and criminal justice functions in Iraq (sec. 865)**

The committee recommends a provision that would require the Secretary of Defense to report to Congress on contractor performance of security, intelligence, law enforcement, and criminal justice functions in Iraq. The report would address issues including the rationale for Department of Defense decisions regarding the performance of such functions and mechanisms used to supervise and direct contractor performance.

**Accreditation study of commercial off-the-shelf processes for evaluating information technology products and services (sec. 866)**

The committee recommends a provision that would require the Secretary of Defense to carry out a study of commercial off-the-shelf processes available to measure the quality of information technology, and to determine whether to accredit such a process for use in procurements of information technology and related services throughout the Department of Defense.

The committee understands that the Department has used a process developed by the Software Engineering Institute of Carnegie Mellon University, known as "Capability Maturity Model integration" (CMMI) to measure the quality of information technology. However, this process has not been used consistently across the Department. The provision recommended by the committee would require the Secretary to review the potential benefits of using CMMI, or any other commercial off-the-shelf process for measuring the quality of information technology, on a consistent basis across the Department.



**Inapplicability of Randolph-Sheppard Act to military dining facilities (sec. 867)**

The committee recommends a provision that would clarify the coverage of military dining facilities under the Randolph-Sheppard Act (section 107(e)(7) of title 20, United States Code). The provision would authorize the continued award of contracts for the operation of such facilities to the blind and severely disabled under the Javits-Wagner-O'Day Act (41 U.S.C. section 48).

**Items of Special Interest**

**Department of Defense's use of advisory committees, such as the Defense Policy Board Advisory Committee and the Defense Science Board**

The Defense Policy Board Advisory Committee (DPB) and the Defense Science Board (DSB) are two of the most influential advisory committees in the Department of Defense. Together, they include more than 80 members who advise the Secretary of Defense, Deputy Secretary of Defense, Under Secretary of Defense for Policy, Under Secretary of Defense for Acquisition, Technology, and Logistics, and the Chairman of the Joint Chiefs of Staff. Many DPB and DSB members are employed by or have a financial interest in defense industry companies or related entities. This raises concerns about the potential that board members could impact Department policies on matters of interest to their employers.

In the course of the Senate Armed Services Committee's investigation and hearings regarding the U.S. Air Force proposal to lease 100 Boeing 767 tanker aircraft, the committee obtained information suggesting that the contractor sought to have a number of board members lobby senior Department officials on its behalf. Because the Department has not yet made available documents requested by the committee, the committee is not yet in a position to assess the results of this effort.

Given the committee's serious concerns regarding potential conflicts of interest of DPB and DSB members, the Inspector General of the Department is directed to examine whether the policies and procedures of the DPB and DSB, including the number of waivers, exemptions, and recusals that have been filed by board members, are adequate to sufficiently insulate its members from advising on programmatic decisions that may benefit defense contractors and/or organizations with which DPB and DSB members may have a direct or indirect financial interest. In addition, the Inspector General shall make recommendations to ensure that the DPB and DSB policies and procedures adequately preclude the appearance of any conflict of interest by the board members and do not permit board members with such conflicts to directly impact government procurement and related policies. Such recommendations shall include consideration of reducing the number of board members, imposing term limits on board members, implementing transparent procedures and public oversight mechanisms (including public board meetings), tightening requirements regarding filing of financial and other disclosure statements (including making such documents available to the public), and disallowing any exemptions or waivers for DPB and DSB members regarding matters that may impact

their defense industry employers and clients, directly or indirectly. The Inspector General shall submit a report on his findings and recommendations to reform Board policies and procedures by March 15, 2005, to the Committees on Armed Services of the Senate and the House of Representatives.

#### **Implementation of section 8002 of the Federal Acquisition Streamlining Act of 1994**

The committee is aware of concerns about the implementation of section 8002 of the Federal Acquisition Streamlining Act of 1994 (FASA). Section 8002 requires that contracts for the acquisition of commercial items contain, to the maximum extent practicable, only those contract clauses that are: (A) required by law or executive order; or (B) consistent with standard commercial practice. This requirement has been implemented through Part 12.3 of the Federal Acquisition Regulation (FAR).

The committee urges the Department of Defense to review its training on contracting for commercial items and take appropriate steps to ensure that the Department's contract officials comply with the requirements of section 8002 of FASA and Part 12.3 of the FAR.

#### **Lean manufacturing**

The committee is concerned that long cycle times and increasing costs for new platforms could compel the military services to retain older, legacy platforms beyond scheduled retirement, procure additional numbers of existing platforms, or reduce force structure.

The Department's adoption of spiral development strategies should help in fielding new platforms sooner, with block upgrades to improve capabilities. However, spiral development alone is unlikely to fully address the problems of long cycle times and increasing production costs.

For this reason, the committee urges the Department to place greater emphasis on lean manufacturing technologies and processes, and to consider experimentation with the wholesale adoption of such technologies and processes across the spectrum of an entire acquisition program. In particular, the Department should consider the potential of incorporating lean manufacturing technologies and processes to reduce total ownership cost beginning with concept development and continuing through developmental testing for an acquisition program. The committee directs the Department to assess the feasibility of establishing demonstration programs for this purpose. The committee understands that the Air Force Research Laboratory has already worked with lean manufacturing technologies to reduce total ownership cost on certain projects.

The committee directs the Department to report to the congressional defense committees by February 15, 2005 on its plans to increase the emphasis placed on lean manufacturing technologies and processes in acquisition programs, and the potential for broader application of such technologies and processes throughout the Department.

### **Management of contracts for services by the military departments**

Section 801 of the National Defense Authorization Act for Fiscal Year 2002 requires each of the military departments to establish a management structure for the procurement of services comparable to the structure already in place for the procurement of products by the Department of Defense. Section 801 also requires each department to designate an official to be responsible for the management of the procurement of services.

The committee understands that the Air Force has established a Program Executive Officer (PEO) for Services, who has the responsibility for handling all services' acquisitions in excess of \$100.0 million. The committee also understands that the Air Force has established a management structure for smaller acquisitions. Both the PEO and the management structure are designed to provide a central focus on services' acquisition, and to ensure that the Air Force makes full use of preferred contract vehicles, such as performance-based contracts.

The committee urges the other military departments to review the management structure established by the Air Force to implement the requirements of section 801, and to strongly consider establishing similar structures.

### **Periodic Inspector General audits of undefinitized contract actions**

At the request of the Department of Defense, the committee reviewed section 908 of the Defense Acquisition Improvement Act of 1986 (Public Law 99-500), as contained in section 101(c) (10 U.S.C. 2326 note), to determine whether the required audits were unneeded or burdensome. The committee is of the view that this provision, which requires that the Department Inspector General (IG) conduct "periodic" audits of undefinitized contract actions, gives the IG broad discretion to determine both the appropriate scope of such audits and when they are required.

At the same time, undefinitized contract actions remain a valid concern. Cost-type contracts or task orders that have not been definitized provide contractors little incentive to control costs. In this regard, the committee has learned that the process of definitizing contract actions for the reconstruction of Iraq has been extremely slow, leaving the Department vulnerable to escalating costs. The committee directs the IG to exercise its discretion under section 908 to audit and report on this category of undefinitized contract actions.

### **Prohibition on fees for bidding on government contracts and subcontracts**

The committee has learned that some prime contractors on defense contracts are using online bidding services and reverse auctions to award subcontracts. Some of these services require bidders to pay fees which can be substantial. In one case, an online bidding service charges up to two percent of the bid amount and insists that the full amount be paid before the subcontract could be awarded.

The committee believes that defense contractors should have broad leeway to make use of commercial practices, including online bidding services and reverse auctions to award their subcontracts. However, the committee is concerned that a practice of charging substantial participation fees to bidders on subcontracts could unnecessarily limit access to government contracts and discourage small businesses from bidding.

Reasonable costs incurred by a prime contractor in running a purchasing system, including costs of conducting online bidding or reverse auctions, are allowable costs under government contracts. A prime contractor who incurs such costs can seek reimbursement from the government without limiting access or discouraging small business participation in its subcontracts. The committee believes that this is a more appropriate manner to handle such costs.

Accordingly, the committee directs the Department of Defense to ensure, through the established review process for government-approved purchasing systems, that prime contractors on defense contracts do not charge bidders on subcontracts more than a nominal fee for participation in online bidding services, reverse auctions, and similar processes.

## **TITLE IX—DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT**

### **Subtitle A—Reserve Components**

#### **Modification of stated purpose of the Reserve components (sec. 901)**

The committee recommends a provision that would amend section 10102 of title 10, United States Code, to clarify the purpose of the Reserve components. By eliminating statutory reference to planned mobilizations, the provision would more accurately reflect the operational mission responsibilities and contributions of National Guard and Reserve members and the manner in which Reserve forces will be employed in the future.

#### **Commission on the National Guard and Reserves (sec. 902)**

The committee recommends a provision that would establish a Commission on the National Guard and Reserves. The changes that have already taken place in the structure and employment of the Reserve component and the changes that have been called for by the Department in the career employment of reservists and guardsmen call for a comprehensive assessment by an independent entity. The many proposals for enhancements to the compensation and benefits of Reserve component members, including health care for reservists and their families, that have been made in connection with these changes must be examined in light of the future roles, missions, career paths, and requirements that will be placed upon the Guard and Reserve organizations and their individual members.

Among other matters, the Commission would be required to assess the following in performing its review: (1) the current and future roles and missions of the National Guard and Reserve; (2) the capabilities of the Reserve components and the manner in which units and personnel of the Reserve Component may be best employed to provide support for U. S. military operations and national security objectives, including homeland defense; (3) the current organization and structure of National Guard and Reserve forces and future planning of the Department of Defense and the Armed Forces for future organization and structure of Reserve component forces; (4) the current organization and funding of the Reserve components for training and an assessment of the manner in which the Reserve component should be organized and funded to achieve appropriate training objectives and operational readiness; (5) the policies and programs of the National Guard and Reserve for achieving operational, medical, and personal readiness; (6) compensation and benefits of National Guard and Reserve personnel, including availability of health care and health care insurance and an assessment of cost-effectiveness of proposals for change and the impact on ac-

tive-duty and reserve career attractiveness, recruiting, and retention; (7) review of the Reserve Continuum of service and changes to traditional Reserve and Guard career paths and future efforts that must be made to ensure professional development; and (8) funding of the National Guard and Reserve including National Guard and Reserve Equipment accounts and funding for active duty and Reserve personnel accounts.

Not later than March 31, 2005, the commission would be required to submit a report setting forth a strategic plan for the work of the commission and the activities and initial findings of the commission. The commission would be required to submit its final report no later than December 31, 2005.

The committee also recommends establishment of an independent review board in 2006 following the termination of the Commission. The duties of the review board would be to annually review the roles and missions of the reserve components and the compensation and other benefits, including health care benefits, that are provided for members of the reserve components.

**Chain of succession for the Chief of the National Guard Bureau (sec. 903)**

The committee recommends a provision that would modify section 10502 of title 10, United States Code, to establish a new chain of succession for the position of Chief of the National Guard Bureau. Under current law, the Vice Chief of the National Guard Bureau, a major general, is junior in rank to both the Directors of the Army National Guard and the Air National Guard. This provision would specify that the more senior officer of either the Army National Guard or Air National Guard on duty with the National Guard Bureau would assume responsibility as the acting Chief of the National Guard Bureau, if the Chief vacates the office or is otherwise unable to perform the duties of that office.

**Redesignation of Vice Chief of the National Guard Bureau as Director of the Joint Staff of the National Guard Bureau (sec. 904)**

The committee recommends a provision that would change the title of the Vice Chief of the National Guard Bureau to Director of the Joint Staff of the National Guard Bureau. This title more accurately reflects the duties of the incumbent of that office.

**Authority to redesignate the Naval Reserve (sec. 905)**

The committee recommends a provision that would authorize the Secretary of the Navy, with the approval of the President, to redesignate the United States Naval Reserve as the "United States Navy Reserve" effective 180 days after the date on which the Secretary submits recommended legislation. This change is supported by the Navy's senior leadership as underscoring the contributions and commitment to operational support and enhancement of warfighting that naval reservists provide on a daily basis. The committee supports the initiatives taken by Chief of Naval Operations, the Chief of the Naval Reserve, and commanders at every level to achieve a fully integrated, total force, and endorses the concept of "One Navy."

### **Subtitle B—Other Matters**

#### **Study of roles and authorities of the Director of Defense Research and Engineering (sec. 911)**

The committee recommends a provision that would require the Secretary of Defense, through the Defense Science Board (DSB), to carry out a study of the roles and authorities of the Director, Defense Research and Engineering (DDRE). The study would examine past and current activities of the Office of the Director, Defense Research and Engineering (ODDRE), and provide an analysis and recommendations for roles, authorities, and resources required to enable the DDRE to effectively perform the required mission.

Specifically, the DSB study would analyze the relationship of the DDRE to other senior science and technology (S&T) executives, and would review the Director's authority over S&T planning, programming, and budgeting. In addition, the study would review appropriate future roles and authorities for the Director and relationships to: laboratory and technical center management; workforce development; technology transition; technical review of Department of Defense acquisition programs and policies, and other items identified by the Secretary.

The committee is concerned about the gradual deterioration of the authority and stature of the ODDRE over the last decade. In the past, this position, or its equivalent, played the leading role in planning, programming, and coordinating the research and technology programs of the Department. Historically, the person occupying this position also had considerable budgetary authority to invest in critical defense technologies and significant access to the highest levels of defense leadership. More recently, there are indications that the DDRE plays more of a consultation and liaison role with the services and S&T components and has struggled to raise the profile of S&T priorities with other relevant organizations in the Department, especially within acquisition program offices and the warfighting community. As the Department continues to pursue transformational capabilities, which are heavily dependent on technology, a strong S&T advocate is critical.

The committee notes that the Department has recently updated the directive that establishes the authorities of the DDRE, including naming the DDRE as the Chief Technology Officer of the Department. However, the committee believes a comprehensive review of the roles and authorities of the position will provide valuable recommendations to ensure the DDRE has the authorities and resources to perform appointed missions.

#### **Directors of small business programs (sec. 912)**

The committee recommends a provision that would change the title of the Department of Defense's "Office of Small and Disadvantaged Business Utilization" to the "Office of Small Business Programs" to more clearly represent the office's span of authority. The name would not reflect a change in emphasis or support for "disadvantaged" businesses, but rather would clarify that the Office of Small Business Programs has the full range of authority over many other Small Business Programs that presently are not reflected in the office's title. The new title would capture the overarching na-

ture of the program, which encompasses the small disadvantaged business, service-disabled veteran-owned small business, qualified historically underutilized business zone (HUBZone) small business, women-owned small business, and the very small business programs.

**Leadership positions for the Naval Postgraduate School (sec. 913)**

The committee recommends a provision that would modify section 7042 of title 10, United States Code, to change the title of the head of the Naval Postgraduate School from Superintendent to President. This would be consistent with titles in use by civilian universities, particularly those that grant graduate degrees, and with other military war colleges.

This provision would also modify section 7043 of title 10, United States Code, to change the title of the Academic Dean to Provost and Academic Dean, and to specify that this official would be selected by the Secretary of the Navy, after consultation with the Naval Postgraduate School Board of Advisors and in consideration of the recommendation of the leadership and faculty of the Naval Postgraduate School. This change would be consistent with civilian university practices.

**United States Military Cancer Institute (sec. 914)**

The committee recommends a provision that would establish a United States Military Cancer Institute within the Uniformed Services University of the Health Sciences. The institute would conduct research on the causes, prevention, and early detection of cancer, including epidemiological features of cancer and impact of genetic and environmental factors and disparities in health among populations of various ethnic origins. The research would also include complementary research on oncologic nursing.



## **TITLE X—GENERAL PROVISIONS**

### **Subtitle A—Financial Matters**

#### **Transfer authority (sec. 1001)**

The committee recommends a provision that would provide for the transfer of funds authorized in Division A of this Act to unforeseen higher priority needs in accordance with normal reprogramming procedures. Additionally, in recognizing the need to provide the Secretary of Defense with the necessary flexibility to manage the Department of Defense, the provision increases the transfer authority limitation to \$3.0 billion.

#### **United States contribution to NATO common-funded budgets in fiscal year 2005 (sec. 1002)**

The resolution of ratification for the Protocols to the North Atlantic Treaty of 1949 on the Accession of Poland, Hungary, and the Czech Republic contained a provision (section 3(2)(C)(ii)) that requires a specific authorization for U.S. payments to the common-funded budgets of the North Atlantic Treaty Organization (NATO) for each fiscal year, beginning in fiscal year 1999, in which U.S. payments exceed the fiscal year 1998 total. The committee recommends a provision to authorize the U.S. contribution to NATO common-funded budgets for fiscal year 2005, including the use of unexpended balances from prior years.

#### **Reduction in overall authorization due to inflation savings (sec. 1003)**

The committee recommends a provision that would reduce the amount authorized to be appropriated to the Department of Defense by \$1.7 billion to reflect the reduced inflation estimates in the Congressional Budget Office's annual review of the budget. The Department assumed an inflation rate of 1.5 percent in building its fiscal year 2005 budget submission. However, the Congressional Budget Office, in "The Budget and Economic Outlook: Fiscal Years 2005 to 2014", published on January 26, 2004, estimated a 1.1 percent inflation rate. The savings, resulting from lower-than-expected inflation for fiscal year 2005, is \$1.7 billion.

#### **Defense business systems investment management (sec. 1004)**

The committee recommends a provision that would require the Department of Defense to develop a comprehensive architecture for all business systems of the Department. The provision would also prohibit significant investments in new business systems or upgrades to existing business systems that would be inconsistent with the new architecture.

This provision would update and replace section 1004 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003, which included similar requirements. The committee is disappointed that despite an ambitious agenda announced more than two years ago, the Department does not have a working blueprint for new business systems, has not started to field new systems based on such a roadmap, and does not have an effective system in place to control and coordinate investments in business systems by individual Department organizations.

The committee believes that the comprehensive reform of the Department's business systems is essential to provide the Department's leadership with timely, accurate financial information on which sound business decisions can be based. Successful reform will only be possible if a reform process is institutionalized, so that it will carry on from one administration to the next.

The provision recommended by the committee seeks to institutionalize the reform process by updating and strengthening section 1004 in several respects.

First, the new provision would clarify that architecture requirements and investment controls apply to all "defense business systems" and not just "financial systems". Defense business systems are defined to include any information system operated by, for, or on behalf of the Department to support business activities such as acquisition, financial management, logistics, strategic planning and budgeting, installations and environment, and human resources management.

Second, the new provision would specify that the new defense business enterprise architecture must cover not only systems, but also functions and activities supported by such systems, and must be sufficiently defined to effectively guide, constrain, and permit implementation of business system solutions.

Third, the new provision would establish a more effective system for controlling investments by: (1) streamlining requirements for the certification of new investments; (2) providing that an investment in an uncertified business system is a violation of the Anti-Deficiency Act, as codified in section 1341 of title 31, United States Code; (3) adopting the "domain" system developed by the Department, under which responsibility for specific categories of business systems is assigned to the appropriate Under Secretary or Assistant Secretary of Defense; and (4) requiring each domain "owner" to establish a process for reviewing defense business system investments.

Fourth, the new provision would require the Department to submit an annual budget exhibit providing detailed information on defense business systems expenditures.

Fifth, the new provision would establish a Defense Business System Management Committee to provide oversight and policy guidance over the business systems modernization process.

Finally, the new provision would streamline reporting requirements included in the superseded provision.

**Uniform funding and management of service academy athletic and extracurricular programs and similar supplemental mission activities (sec. 1005)**

The committee recommends a provision that would authorize the service academies to treat funds appropriated for athletics and extracurricular programs as non-appropriated funds in order to achieve uniform funding and management of those funds. The provision would apply sections (a) and (b) of section 2494 of title 10, United States Code, which relate to morale, welfare and recreation programs, to the service academies' management of funds for athletic and extracurricular programs. The committee expects the Secretary of Defense to issue regulations setting forth the procedures by which funds will be managed under this provision, and expects the application of this authority to yield efficiencies and better oversight of the funding and management of service academy athletic and extracurricular programs.

**Subtitle B—Naval Vessels and Shipyards**

**Exchange and sale of obsolete Navy service craft and boats (sec. 1011)**

The committee recommends a provision that would allow the Secretary of the Navy to use the retained proceeds from the sale of obsolete Navy service craft and boats to pay for the preparation of obsolete service craft and boats for sale or exchange.

Existing law allows the Department of the Navy to use proceeds from the sale of obsolete Navy service craft and boats to purchase replacements, but not for the costly process of preparing service craft or boats for sale or exchange. This preparation includes costs for towing, storage, defueling, removal and disposal of hazardous wastes, and environmental surveys to determine the presence of regulated polychlorinated biphenyl (PCB) containing materials. If PCBs are found, it would include the costs of the removal and disposal of regulated PCB-containing materials.

This provision would facilitate and accelerate the disposal of obsolete service craft and boats.

**Limitation on disposal of obsolete naval vessel (sec. 1012)**

The committee recommends a provision that would restrict the Secretary of the Navy from disposing of the decommissioned destroyer ex-Edson (DD-946), until October 1, 2007, to an entity that is not a nonprofit organization. This restriction would not apply if the Secretary first determines that no nonprofit organization meets the criteria for donation of that vessel under section 7306(a)(3) of title 10, United States Code.

**Award of contracts for ship dismantling on net cost basis (sec. 1013)**

The committee recommends a provision that would allow the Secretary of the Navy to accept competitive bids for domestic warship dismantling contracts based on a net cost basis, that is, the estimated cost of performance of the contract minus the estimated value of the scrap and reusable equipment. Under existing law, the Department of the Navy cannot award contracts based on the esti-

mated value of the sale of the scrap and reusable equipment. This provision would encourage contractors to employ scrap processing and sale methods that result in a lower overall cost to the government.

### **Subtitle C—Reports**

#### **Report on contractor security in Iraq (sec. 1022)**

The committee recommends a provision that would require the Secretary of Defense to report to Congress on contractor security in Iraq. The report would address issues, including the number of contract security employees in Iraq; their access to weapons and other critical security equipment; the number of casualties among contract security employees; and an assessment of the extent to which they have been engaged in hostile fire situations.

### **Subtitle D—Matters Relating to Space**

#### **Space posture review (sec. 1031)**

The committee recommends a provision that would require the Secretary of Defense to review national security space policy, programs, requirements and objectives, to submit an interim report on this review to the congressional defense committees by March 15, 2005, and a final report by December 31, 2005.

#### **Panel on the future of military space launch (sec. 1032)**

The committee recommends a provision that would establish a panel to study the future of U.S. military space launch, and make recommendations concerning launch operational concepts and architectures; launch technologies; enabling technologies; budget priorities; and an optimal path forward to implement the panels recommendations. The panel would be required to report on its findings to the Secretary of Defense and the congressional defense committees no later than one year after its first meeting.

The committee recognizes the importance of space launch to U.S. national security. The Evolved Expendable Launch Vehicle (EELV) is the program through which most military payloads are launched. The committee notes that the commercial launch market, on which the two current EELV vendors based their business models, never materialized, and the cost of launch remains very high.

Last year, Congress approved Section 912 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–87), which established a policy of sustaining two launch vehicles or families of launch vehicles capable of launching any national security payload. The committee continues to believe that redundancy in launch systems is necessary for assured access to space, but also recognizes that the technology, economics, and operational concepts associated with space launch will continue to evolve. The committee believes that a panel of experts experienced in the various facets of launch can provide valuable insights for Department of Defense leaders on how access to space can best be ensured in the future.

**Operationally responsive national security payloads for space satellites (sec. 1033)**

The committee recommends a provision that would establish a separate program element for operationally responsive satellite payloads managed by the Office of Force Transformation of the Office of the Secretary of Defense. The provision would also authorize \$25.0 million for the new program element.

The committee notes that, in testimony before the Strategic Forces Subcommittee, Committee on Armed Services of the Senate, the Under Secretary of the Air Force, the Commander, U.S. Strategic Command, the Commander of Air Force Space Command, and the Director of the Office of Force Transformation all indicated their belief that the development of small, operationally responsive satellites would make a valuable contribution to the operational effectiveness of the warfighter. The Air Force budget request includes \$35.4 million to develop an operationally responsive launch vehicle, intended to place small payloads into low earth orbit within hours or days of the requirement to proceed, and to do so inexpensively. The Office of Force Transformation has sponsored the development of experimental tactical satellites (TACSATs), intended to demonstrate the rapid design and fabrication of operationally useful satellite payloads. The committee notes that TACSAT-1 and TACSAT-2 are fully funded, but that no funding has been programmed for TACSAT-3, a payload that would be developed in fiscal year 2005, or other future TACSAT missions. The committee believes that the continued development of operationally responsive satellite payloads must proceed vigorously in parallel with operationally responsive launch capabilities.

The committee believes that acquisition and operational models based on inexpensive launch and smaller satellites provide the promise of enhancing the effectiveness of U.S. military and intelligence space operations and mitigating some of the endemic development problems that have afflicted U.S. space programs over the past decade. The committee believes that such an approach could reduce the vulnerability of on-orbit capabilities, improve responsiveness of space assets to warfighter needs, expand the space industrial base, refresh on-orbit technology on a more regular basis, and lower technical risk and reduce management challenges.

The committee recognizes that developing standards and protocols to enable rapid integration of payloads, satellite buses, and launch vehicles will be critical to the success of an approach based on more numerous launches of small payloads, and encourages the Department of Defense to develop such standards and protocols promptly.

**Nondisclosure of certain products of commercial satellite operations (sec. 1034)**

The committee recommends a provision that would exempt from disclosure under the Freedom of Information Act (FOIA), (section 552 of title 5, United States Code), data that are collected by land remote sensing and are prohibited from sale to customers other than the United States and its affiliated users under the Land Remote Sensing Policy Act of 1992, (section 5601 et seq. of title 15, United States Code). The exemption would also include any im-

agery and other product that is derived from such data. State and local laws mandating disclosure by a State or local government would be preempted.

The United States often enters into exclusive licensing agreements with commercial satellite operators that prohibit these companies from selling certain unclassified data and imagery, except to the United States and to approved customers. Compelled release of such data and imagery by the United States under FOIA defeats the purpose of these licensing agreements, removes any profit motive, and may damage the national security by mandating disclosure to the general public upon request. While the data and imagery could be protected from disclosure under FOIA by classifying them, the United States prefers to keep them unclassified. Unclassified matter is more easily shared with coalition partners in contingency operations and with State and local officials in disaster relief and homeland security operations.

#### **Subtitle E—Defense Against Terrorism**

##### **Temporary acceptance of communications equipment provided by local public safety agencies (sec. 1041)**

The committee recommends a provision that would allow military installations that have Memoranda of Understanding (MOUs) or Memoranda of Agreement (MOAs) with local and state first responders to accept ham radios or communication equipment on an interim basis to facilitate communication with local communities until interoperability of communications has been established.

The committee notes that a significant number of military installations have mutual aid agreements with their surrounding communities. However, because there are no national standards for first responder equipment interoperability, many civilian first responders are unable to talk to each other using their emergency communications equipment because their systems are not compatible. That problem will not be overcome until national interoperability standards are established that guide state and local first responders in effectively and efficiently managing communications procurement to ensure the interoperability of all systems.

In the interim, the committee is concerned that such interoperability challenges could severely hinder response efforts in the event of a natural or man-made disaster. One of the most important “lessons learned” from the events of 9–11 was the importance of interoperability of communications equipment at the scene of large-scale disasters. Allowing commanders of military installations with mutual aid agreements to accept, on a temporary basis, communications equipment from a local public safety agency would enable the local first responders to easily communicate with military responders during a natural or man-made disaster.

The committee expects that this provision would be used to acquire a single radio or communication set to be located at the emergency response nexus, or hospital, at the military installation.

**Full-time dedication of airlift support for homeland defense operations (sec. 1042)**

The committee recommends a provision that would require the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives no later than April 1, 2005 on the feasibility and advisability of establishing full-time, dedicated airlift support for homeland defense operations, including operations to transport Weapons of Mass Destruction-Civil Support Teams (WMD-CST), the Air Force Expeditionary Medical (EMEDS) teams dedicated to homeland defense, and the Department of Energy Emergency Response Teams (DOE-ERT), in response to natural and man-made disasters.

The committee expects that report would be produced in consultation with all relevant stakeholders, including U.S. Northern Command (NORTHCOM) and U.S. Transportation Command (TRANSCOM). The report shall include information on the adequacy of existing plans and capabilities for meeting the transportation requirements of the WMD-CSTs, the homeland defense EMEDS, and the DOE ERTs, and a plan for addressing any shortfalls identified by this report. If the report recommends that dedicated airlift capability for homeland defense operations be established, the committee encourages the Secretary of the Air Force to exercise his existing authority to do so.

Time is of the utmost importance in responding to any disaster. The real value of a WMD-CST is its ability to rapidly provide unique reconnaissance and diagnostic capabilities to the on-site commander during the initial stages of an incident. Without airlift capability, WMD-CSTs may not be able to reach a particular location in a timely manner due to destroyed infrastructure, such as bridges, or traffic jams. In addition, the ability to airlift additional WMD-CSTs to a disaster scene could provide the incident commander with multiple teams to respond to a single incident, as well as back-up and relief for the first responding WMD-CST.

**Survivability of critical systems exposed to chemical or biological contamination (sec. 1043)**

The committee recommends a provision that would direct the Secretary of Defense to submit a plan to the congressional defense committees that describes the Department of Defense's systematic approach for ensuring the survivability of defense critical systems exposed to chemical or biological contamination. At a minimum, the plan should include: (1) policies for ensuring that the survivability of defense critical systems in the event of chemical or biological agent contamination is adequately addressed throughout the Department; (2) a systematic mechanism for identifying those systems that are defense critical systems; (3) specific testing procedures to be used during the design and development of new defense critical systems; and (4) an up-to-date central database that contains comprehensive information on the effects of chemical and biological agents and decontaminates on materials used in defense critical systems and is easily accessible to personnel who have duties to ensure the survivability of defense critical systems upon contamination of such systems by chemical and biological agents.

The committee agrees with the Department's assessment that it is increasingly likely that an adversary will use chemical or biological weapons against U.S. forces to degrade superior U.S. conventional warfare capabilities, placing servicemembers' lives and effective military operations at risk. As the Department moves to transform its weapons systems, it is essential to ensure that new systems deemed defense critical be able to withstand chemical and biological attacks.

In addition, the committee directs the General Accounting Office to evaluate the plan to ensure that it is actionable, and provide comments to the congressional defense committees within 180 days of the Department's submission of the plan.

#### **Subtitle F—Matters Relating to Other Nations**

##### **Humanitarian assistance for the detection and clearance of landmines and explosive remnants of war (sec. 1051)**

The committee recommends a provision that would add a new section to chapter 20 of title 10, United States Code, to authorize the Secretary of Defense to provide military training, education, and technical assistance to foreign nations for the purpose of detecting and clearing landmines or other explosive remnants of war.

The provision recommended by the committee would clarify existing law by separating authority to conduct humanitarian mine clearing actions from the authority to conduct humanitarian and civic assistance. The provision would also permit the Department of Defense to provide training and assistance in the detection and clearance of unexploded and unexpended ordnance, or explosive remnants of war, in addition to landmines.

The provision would prohibit direct involvement of U.S. military personnel in actual detection and clearance activities, unless part of an authorized U.S. military operation. The provision would also require the Secretary of State to specifically approve assistance to any foreign country and would limit the cost of any equipment, services, and supplies provided to a foreign country in any fiscal year for this purpose to \$5.0 million.

##### **Use of funds for unified counterdrug and counterterrorism campaign in Colombia (sec. 1052)**

The committee recommends a provision that would extend, through fiscal year 2006, the expanded authority for the Department of Defense to use counterdrug funds to support the Government of Colombia's unified campaign against narcotics cultivation and trafficking, and against terrorist organizations in Colombia. The provision would also change the limitation on the number of U.S. military personnel assigned to Colombia in support of Plan Colombia to 800 personnel, and the number of federally funded contractor personnel employed in support of Plan Colombia to 600 personnel. The committee notes the assurances of the Department that the ban on participation of U.S. military forces in combat operations in Colombia continues to be strictly enforced and that the Department will continue to take all appropriate steps to minimize the likelihood that U.S. military or civilian contractor personnel would be inadvertently exposed to combat situations.



Section 1023 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) gave the Department expanded authority for the use of counterdrug funds to conduct unified counterdrug and counterterrorism activities in Colombia in fiscal year 2004. This expanded authority will expire on September 30, 2004, in the absence of an extension of authority by the Congress.

The committee is encouraged by reports from the Secretary of Defense, the Commander, U.S. Southern Command, and the President of Colombia about progress being made in eradicating drug cultivation and in combating the narco-terrorist groups that have terrorized much of rural Colombia for years, financed largely by money from drug trafficking. The Colombian government and the Colombian military have reacted positively to the financial and military assistance provided by the United States and are making tangible progress in lowering drug production and in reestablishing control over large portions of the country. With U.S. military training and assistance, the Colombian Armed Forces have established themselves as one of the most trusted and respected institutions in Colombia, second only to the Catholic Church, according to Gallup-Colombia and other polls. The leadership of President Uribe has clearly produced positive momentum in this struggle for democracy and the rule of law. Much remains to be done, however, and the three major terrorist groups remain clear and present dangers to peace and security. Continued U.S. assistance must be sustained to help the Government of Colombia to finally defeat drug financed terrorism in their country, and reduce the threat of drugs and terrorism in the region.

**Assistance to Iraq and Afghanistan military and security forces (sec. 1053)**

The committee recommends a provision that would authorize the Secretary of Defense, with the concurrence of the Secretary of State, to provide assistance in fiscal year 2005 of up to \$150.0 million to Iraq and Afghanistan military or security forces solely to enhance their ability to combat terrorism and support U.S. or coalition military operations in Iraq and Afghanistan, respectively. Assistance provided under this authority could include equipment, supplies, services, and training. This authority would be in addition to any other authority to provide assistance to Iraq and Afghanistan. The provision would require the Secretary to notify the congressional defense committees at least fifteen days prior to providing assistance under this authority.

The committee intends the term “military and security forces” to mean national armies, border security forces, civil defense forces, infrastructure protection forces, and police. The authority provided by this provision would not permit the provision of assistance to nongovernmental or irregular forces such as private militias. The committee expects the prior notifications to the congressional defense committees to include detailed information regarding the proposed amount of funds to be spent, recipients of the funds, and the specific purposes for which the funds would be used.

**Assignment of NATO naval personnel to submarine safety research and development programs (sec. 1054)**

The committee recommends a provision that would authorize the Secretary of the Navy to accept the assignment under certain conditions of members of North Atlantic Treaty Organization (NATO) navies for work on the development, standardization, or interoperability of submarine vessel safety and rescue systems and procedures. In connection with the establishment of the International Submarine Escape and Rescue Liaison Office within the NATO Command's Submarine Activities Atlantic, specialized training and preparation within U.S. Navy activities is essential to promote international standardization in matters of submarine safety and rescue benefitting both U.S. and foreign navies. The authority in this provision would expire on September 30, 2008.

**Subtitle G—Other Matters**

**Technical amendments relating to definitions of general applicability in Title 10, United States Code (sec. 1061)**

The committee recommends a provision that would clarify the definition of “operational range” enacted in the National Defense Authorization Act for Fiscal Year 2004, to make clear that military departments manage ranges as a real property function. It would also make certain conforming amendments with respect to the definition of “congressional defense committees” as enacted in the same Act.

**Two-year extension of authority of Secretary of Defense to engage in commercial activities as security for intelligence collection activities abroad (sec. 1062)**

The committee recommends a provision that would amend section 431(a) of title 10, United States Code, to extend by two years, to December 31, 2006, the authority of the Secretary of Defense to authorize the conduct of commercial activities necessary to provide security for authorized intelligence collection activities abroad.

**Liability protection for persons voluntarily providing maritime-related services accepted by the Navy (sec. 1063)**

The committee recommends a provision that would extend to volunteers working in a maritime training environment the same status and legal protections, for purposes of claims and loss presently available to volunteers working in support of land-based programs.

**Licensing of intellectual property (sec. 1064)**

The committee recommends a provision that would authorize the secretaries of the military departments, under regulations prescribed by the Secretary of Defense, to license trademarks, service marks, certification marks, and collective marks owned or controlled by the Secretary concerned, and to retain fees received from the licensing of such marks. Fees in excess of those necessary to register the marks and operate the licensing program shall be used for morale, welfare, and recreation activities under the jurisdiction of the Secretary concerned.

There is strong consumer demand for products bearing marks of the armed forces. Authorization of such a licensing program would help prevent misuse or abuse of these marks on merchandise or on the Internet, assist with recruiting and retention by promoting greater public awareness of the armed forces, and provide needed support for morale, welfare, and recreation programs.

**Delay of electronic voting demonstration project (sec. 1065)**

The committee recommends a provision that would amend section 1604 of the National Defense Authorization Act for Fiscal Year 2002 to authorize delay in carrying out an electronic voting demonstration project until November 2006.

Section 1604 required the Secretary of Defense to carry out a demonstration project in which absentee uniformed voters would be permitted to cast ballots using an electronic voting system in the general election for federal offices in November 2002. Pursuant to the Secretary's authority to delay implementation, the demonstration project was postponed until November 2004 to plan for an Internet voting option called Secure Electronic Registration and Voting Experiment (SERVE), involving 51 counties in seven States and as many as 100,000 military personnel, was well underway. In February 2004, the Department concluded that the SERVE program could not sufficiently ensure the legitimacy of votes cast in the November 2004 election, and sought authority to further delay the electronic voting demonstration project.

The committee recognizes the effort by the Department of Defense, working in concert with state, county and federal election officials, to bring the SERVE program to fruition, and urges continued examination of feasible means to carry out secure electronic voting. If the Department determines, however, that the implementation of such a demonstration project in 2006 may adversely affect the national security of the United States, the Secretary may further delay implementation until 2008.

**War risk insurance for merchant marine vessels (sec. 1066)**

The committee recommends a provision that would amend the Merchant Marine Act, 1936, to extend through December 31, 2008, the authority of the Secretary of Transportation to provide war risk insurance and reinsurance relating to merchant marine vessels. It would also authorize the investment of excess amounts in the war risk insurance fund in public debt securities of the United States, with maturities suitable to the needs of the fund, bearing interest rates determined by the Secretary of the Treasury and taking into account current market yields on outstanding marketable obligations of the United States of comparable maturity.

**Repeal of quarterly reporting requirement concerning payments for District of Columbia water and sewer services and establishment of annual report by Treasury (sec. 1067)**

The committee recommends a provision that would amend the District of Columbia Public Works Act of 1954, as amended, to repeal the requirement that the Inspector General of each federal department or agency receiving water or sewer services from the Dis-

trict of Columbia submit quarterly reports analyzing the promptness of payments for such services. The interagency billing disputes which gave rise to the present requirement have been resolved; the reports are burdensome and consume resources from higher-priority projects.

These reports would be replaced by an annual report on payments for these services submitted by the Secretary of the Treasury. This report would be submitted to the Committees on Appropriations of the Senate and House of Representatives, and the Committee on Governmental Affairs of the Senate and the Committee on Government Reform of the House of Representatives.

### **Additional Matters of Interest**

#### **Information technology investments to support effective financial management**

The committee recommends a general reduction of \$200.0 million in information technology development modernization for functional area applications in:

- Other Procurement, Army—\$22.4 million;
- Other Procurement, Navy—\$20.9 million;
- Other Procurement, Air Force—\$13.5 million;
- Other Procurement, Defense-wide—\$8.9 million;
- Research and Development, Army—\$18.2 million;
- Research and Development, Navy—\$15.2 million;
- Research and Development, Air Force—\$11.5 million;
- Research and Development, Defense-wide—\$10.5 million;
- Defense Health Programs—\$14.0 million;
- Defense Working Capital Fund Operations—\$60.2 million;
- and Operation and Maintenance, Defense-wide—\$4.7 million.

This reduction is based on the delay in developing the Department of Defense's financial systems architecture and the lack of progress in providing adequate justification for new business information systems investments, and was calculated in the same manner as the reduction taken in the National Defense Authorization Act for Fiscal Year 2004. The committee expects the Department to achieve these reductions by: (1) implementing the requirements of section 1004 of this Act; (2) restricting the development of the Department's business systems until the Department has completed its proposed architecture and transition plan and is in a position to ensure that business system expenditures will be consistent with that architecture and plan; and (3) restricting spending on those programs that do not meet the capital planning and investment control criteria of the Clinger-Cohen Act (40 U.S.C. 1412 and 1422).

### **Items of Special Interest**

#### **Authority for Joint Task Forces to provide support to law enforcement agencies conducting counterterrorism activities**

Section 1022 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136), authorized joint task forces to

provide the same support to law enforcement agencies, subject to all laws and applicable regulations, conducting counterterrorism activities as the Department of Defense is currently authorized to provide law enforcement agencies conducting counterdrug activities.

The committee notes that the purpose of counternarcotics funding is to respond to the grave threat that drug smuggling poses to our nation. Recognizing the nexus between drug trafficking and funding for terrorist activities, the Congress authorized the Department to allow its domestic counternarcotics joint task forces to support domestic law enforcement agencies in the conduct of counterterrorism activities.

The committee urges the Secretary of Defense to provide policy guidance to appropriate combatant commanders and service components to facilitate the implementation of this authority to use counterdrug capabilities and funding to support domestic law enforcement agencies in the conduct of counterterrorism activities.

### **Command and control**

The committee notes that the 2001 Nuclear Posture Review (NPR) recommended an enhanced, flexible strategic command and control system capable of supporting national command authorities and military commanders in military contingencies that are less predictable and more varied than those contemplated during the Cold War. The committee believes that such a command and control system is essential, and that the transition from legacy systems to a system with greater capability must be managed carefully. The committee also notes that command and control capabilities that pertain to strategic forces and national command authorities are inherently joint in nature and that efforts to sustain and upgrade these capabilities must include guidance and attention from the Office of the Secretary of Defense (OSD).

The committee directs the Secretary of Defense to provide the congressional defense committees, no later than February 15, 2005, a report on the current status of the command and control architecture, systems, and capabilities of the United States Strategic Command and plans to achieve the enhanced flexible system called for in the NPR. The report should include: the anticipated cost and schedule for upgrades to legacy systems; an assessment of service management of these programs; a description of planned upgrades; a discussion of the importance of horizontal integration to effective command and control; and a description of the current and future OSD role in planning and management of the transition to an upgraded command and control system.

### **Space acquisition policy**

The committee notes that recent reports, including the 2003 Report of the Defense Science Board/Air Force Scientific Advisory Board Joint Task Force on "Acquisition of National Security Space Programs" and the General Accounting Office (GAO) June 2003 report on "Military Space Operations: Common Problems and Their Effects on Satellite and Related Acquisitions," indicate that space acquisition management difficulties are caused in part by unrealistic budgeting which in turn leads to unexecutable programs. The

committee is concerned that despite the conclusion in these reports, National Security Space Acquisition Policy 03-01 provides the Department of Defense executive agent for space considerable leeway in determining when to fully budget for the expected costs of a space program. The committee believes that this policy is inconsistent with wider Department acquisition policy. The Department's Instruction 5000.2, section 3.7.2.6, requires that all funding needed to carry out the acquisition strategy of a program must be included in the budget and out-year budget plan prior to proceeding to system design and development.

The committee also notes that the GAO September 2003 report "Improvements Needed in Space System Acquisition Management Policy" recommended that the Department of Defense modify its space acquisition policy to separate technology development from product development to reduce the risk that significant problems will be found when a space system is integrated and built. Space acquisition programs are often characterized by limited quantities and great technical complexity, and the committee recognizes that these factors can make separation of technology and product development problematic. The committee also recognizes that such separation can reduce program risk.

Given the development problems endemic in space programs, the committee believes that realistic budgeting should be a high priority, and that alternative space acquisition approaches featuring larger quantities and less technical complexity, could allow for a healthier technology and product development. The committee directs the Secretary of Defense to review these aspects of the National Security Space Acquisition Policy, and report the results of this review to the congressional defense committees.

#### **Strategy for improving preparedness of military installations for incidents involving weapons of mass destruction**

Section 1402 of the Bob Stump National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314) required the Department of Defense to develop a comprehensive plan for improving the preparedness of military installations for preventing and responding to terrorist attacks, including attacks involving the use or threat of use of weapons of mass destruction (WMDs). The plan was to include nine elements reflecting a preparedness strategy and performance plan. The Department submitted a report to Congress on September 2, 2003 that addressed the legislative requirement for a plan.

The committee notes that many initiatives discussed in the plan are not yet fully defined, and organizational roles and responsibilities are changing. Additionally, Chemical, Biological, Radiological, Nuclear and High Explosive (CBRNE) standards and concepts of operations have not been issued; the roles and responsibilities of the Assistant Secretary of Defense, Homeland Defense (ASD/HD), and the Commander, U.S. Northern Command (NORTHCOM), have not been fully defined; and no single integrating organization with the authority and responsibility for all aspects of installation preparedness improvements has been designated.

The committee expects the Department to take the necessary steps to address these issues in the near future. The committee is particularly concerned about the lack of a designated official responsible for domestic installation force protection integration. The committee believes that the Commander, NORTHCOM, should be responsible for the protection of military installations in the United States. The committee notes that this is in accordance with the Unified Command Plan, which directs that combatant commanders be responsible for force protection within their areas of responsibility.





## **TITLE XI—DEPARTMENT OF DEFENSE CIVILIAN PERSONNEL POLICY**

### **Science, Mathematics And Research for Transformation (SMART) Defense Scholarship Pilot Program (sec. 1101)**

The committee recommends a provision that would establish a pilot program within the Department of Defense to provide targeted educational assistance to individuals seeking a baccalaureate or an advanced degree in science and engineering disciplines that are critical to national security. This provision would allow individuals to acquire such education in exchange for a period of employment with the Department of Defense in the areas specified. The committee recommends that the Director, Defense Research and Engineering be designated to manage the program.

The Committee remains concerned with the aging technical workforce and statistics which point to a growing deficiency in the right mix of scientists and engineers to support our national security workforce needs. Testimony to the committee over the last few years further emphasizes the science and engineering workforce challenge for the Department that this section is designed to address.

The Department has implemented a series of successful programs to increase the number of students pursuing degrees in selected fields, but has not been as successful in recruiting and retaining scientists and engineers for positions in its laboratories, service components, and defense agencies.

A rapid, well managed infusion of a new generation of defense science and engineering personnel who are experts in the 21st century defense-related critical skills is needed to maintain U.S. defense technology dominance. As a means of increasing the number of U.S. citizens trained in disciplines of science and engineering of military importance, the committee authorizes \$10.0 million to carry out this pilot program.

The committee understands that the Under Secretary of Defense for Acquisition, Technology and Logistics recently sent a memo to the secretaries of the military departments, the Under Secretaries of Defense, and the directors of the defense agencies initiating a survey of science, math, and engineering education activities being conducted by the Department at all levels of education. The committee commends the Department on this effort and requests that a report on the results of the survey be delivered to the committee as soon as it is completed.

### **Foreign language proficiency pay (sec. 1102)**

The committee recommends a provision that would eliminate the restriction in current law that foreign language proficiency pay may be paid only to those civilian employees working in support of contingency operations. The committee believes that broader use of

this authority will help in the recruitment and retention of civilian foreign language experts needed in support of a changing international security environment and the global war on terrorism.

**Pay and performance appraisal parity for civilian intelligence personnel (sec. 1103)**

The committee recommends a provision that would require the Secretary of Defense to fix the rates of basic pay for employees within the Department's Civilian Intelligence Personnel System in relation to rates of pay provided for their civilian counterparts elsewhere within the Department under authorities provided to the Secretary in the National Security Personnel System of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136). The provision would also mandate the implementation of a performance appraisal system for intelligence senior executive service (SES) personnel that would make meaningful distinctions based on performance comparable to that provided for SES personnel within the Department in title 5, United States Code.

**Accumulation of annual leave by intelligence senior level employees (sec. 1104)**

The committee recommends a provision that would permit intelligence senior level employees of the Department of Defense to accumulate annual leave in a manner identical to the Department's senior executive service (SES). The committee recognizes that senior level intelligence personnel perform demanding roles that often make it difficult to schedule leave in order to avoid the "use or lose" mandates of section 6304 of title 5, United States Code. This provision would provide the same benefits regarding accumulation of annual leave to intelligence senior level employees, as those currently enjoyed by the Department's SES members in support of a changing international security environment and the global war on terrorism.

**Pay parity for senior executives in defense nonappropriated fund instrumentalities (sec. 1105)**

The committee recommends a provision that would authorize the Secretary of Defense to provide compensation for senior executives of nonappropriated fund instrumentalities equal to the total compensation, including basic pay, of the Department of Defense employees in the senior executive service. The provision would extend to 21 nonappropriated fund instrumentality senior executives the raise in the pay cap for Defense senior executive service members authorized as part of the National Security Personnel System in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136). In order to qualify for higher pay, the committee intends that the senior executives would meet performance standards established in a rigorous performance management system as required for federal civil service employees under section 5382 of title 5, United States Code.

### **Health benefits program for employees of nonappropriated fund instrumentalities (sec. 1106)**

The committee recommends a provision that would codify the requirement in section 340 of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103-337) for a uniform health benefits program for Department of Defense nonappropriated fund employees. The provision would exempt the health benefits program for employees of the Department's nonappropriated fund instrumentalities from taxes, fees, or other payments imposed by State or local law. This provision would afford the employees of the Department's nonappropriated fund instrumentalities the same guarantee of uniform health benefits coverage provided for federal employees, covered by the employee health benefits fund in section 8909 of title 5, United States Code.

### **Items of Special Interest**

#### **National Security Personnel System Implementation**

Congress created the Department of Defense National Security Personnel System in the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108-136), and intended that the Secretary of Defense would collaborate fully with the Director, Office of Personnel Management (OPM) in the design of the program. Further, Congress intended that the Secretary of Defense conduct open developmental processes that included all stakeholders, including labor unions, and adhere to the core principles of merit, fairness, and protection for all employees in civil service.

In March, 2004, the Secretary initiated a strategic review of the implementation of the Department of Defense National Security Personnel System, which resulted in redirection of the Department's initial implementation activities to ensure adherence with the intent of Congress. The Secretary's direction in April, 2004, is consistent with congressional intent that regulations establishing a human resources system, labor relations system, and appellate procedures be agreed to jointly by the Secretary and the Director of OPM, and be issued under procedures outlined by the Administrative Procedures Act, title 5, United States Code. The committee urges the Secretary to pursue a deliberate and inclusive path in implementation of a labor relations system to ensure sufficient experience prior to the committee's consideration of extension of the labor relations system in fiscal year 2009. The committee expects that the Secretary will communicate frequently with Members of Congress, employees, labor unions, and all stakeholders in the implementation of the National Security Personnel System. The committee commends the Secretary for initiating a strategic review and ensuring the necessary redirection of implementation activities. The committee will continuously perform oversight of implementation activities to ensure broad public confidence in the execution of needed improvements to the Department's civil employee system.

#### **Use of contracted training facilities**

The committee notes that the Department of Defense has existing long-term contracts to provide civilian personnel training. Those contracts guarantee that certain facilities will be available to

the Department for its use in support of a variety of training programs. The committee further notes that the Department will incur a significant training requirement as it transitions to the National Security Personnel System (NSPS). Maximizing civilian personnel training for the NSPS within existing contracts would be an efficient use of taxpayer dollars and ease the transition to the new system. To further these goals, the committee directs the Secretary of Defense to report by November 1, 2004, on the Department's plan and schedule for civilian training at existing contract facilities.

## **TITLE XII—COOPERATIVE THREAT REDUCTION WITH STATES OF THE FORMER SOVIET UNION**

### **Specification of Cooperative Threat Reduction programs and funds (sec. 1201)**

The committee recommends a provision that would define the Cooperative Threat Reduction (CTR) programs; define the funds as those authorized to be appropriated in section 301 of this Act; and authorize the CTR funds to be available for obligation for three fiscal years.

### **Funding allocations (sec. 1202)**

The committee recommends a provision that would authorize \$409.2 million, the amount included in the budget request, for the Cooperative Threat Reduction (CTR) program. This provision would also authorize specific amounts for each CTR program element; require notification to Congress 30 days before the Secretary of Defense obligates and expends fiscal year 2005 funds for a purpose other than the purposes described in each of the CTR program elements; and provide limited authority to exceed the amount authorized for a specific CTR program element.

### **Modification and waiver of limitation on use of funds for chemical weapons destruction facilities in Russia (sec. 1203)**

The committee recommends a provision that would make permanent the President's authority to waive, on an annual basis, certain conditions with respect to the chemical weapons destruction facility at Shchuch'ye, Russia. The provision would also clarify that funds obligated, but not expended, prior to lapse of a previously executed waiver could be expended.

### **Inclusion of descriptive summaries in annual Cooperative Threat Reduction (CTR) reports and budget justification materials (sec. 1204)**

The committee recommends a provision that would clarify that the Secretary of Defense should provide the specified Cooperative Threat Reduction (CTR) budgetary and programmatic information both in the CTR annual report and in the budget justification materials that the Department of Defense provides each year as part of the President's annual budget request to Congress.



## **DIVISION B—MILITARY CONSTRUCTION AUTHORIZATION**

### **Explanation of funding tables**

Division B of this Act authorizes funding for military construction projects of the Department of Defense. It includes funding authorizations for the construction and operation of military family housing and military construction for the Reserve components, the defense agencies, and the North Atlantic Treaty Organization (NATO) Security Investment program. It also provides authorization for the base closure account that funds environmental cleanup and other activities associated with the implementation of previous base closure rounds.

The following tables provide the project-level authorizations for the military construction funding authorized in Division B of this Act and summarize that funding by account. The tables also note as “Budget Amend” the projects contained in a fiscal year 2005 amended budget request submitted by the administration on March 5, 2004 to add certain military construction projects for the Army National Guard totaling \$30.0 million.

The budget request for fiscal year 2005 originally included authorization of appropriations for military construction and housing programs totaling \$9,450,475,000. The amended budget request includes authorization of appropriations for military construction and family housing construction totaling \$9,480,475,000.

The committee recommends authorization of appropriations for military construction and housing programs totaling \$9,822,940,000.

**Summary of FY 2005 Military Construction Authorization of Appropriations  
(Dollars in Thousands)**

<b><u>Military Construction</u></b>	<b>President's Budget</b>	<b>Senate Change</b>	<b>Senate Authorized</b>
Military Construction, Army	1,771,285	171,600	1,942,885
Military Construction, Navy	1,060,455	-78,490	981,965
Military Construction, Air Force	663,964	113,005	776,969
Military Construction, Defense-Wide	781,323	-17,100	764,223
Military Construction, Army National Guard	295,657	75,773	371,430
Military Construction, Air National Guard	127,368	87,050	214,418
Military Construction, Army Reserve	87,070	-24,023	63,047
Military Construction, Naval Reserve	25,285	0	25,285
Military Construction, Air Force Reserve	84,556	14,650	99,206
Base Realignment & Closure	246,116	0	246,116
NATO Security Investment Program	165,800	0	165,800
<b>Total Military Construction</b>	<b>5,308,879</b>	<b>342,465</b>	<b>5,651,344</b>
<b><u>Family Housing</u></b>			
Family Housing Construction, Army	636,099	0	636,099
Family Housing Operations & Debt, Army	928,907	0	928,907
Family Housing Construction, Navy	139,107	0	139,107
Family Housing Operations & Debt, Navy	704,504	0	704,504
Family Housing Construction, Air Force	846,959	0	846,959
Family Housing Operations & Debt, AF	863,896	0	863,896
Family Housing Construction, Defense-Wide	49	0	49
Family Housing Operations & Debt, Def-Wide	49,575	0	49,575
DoD Housing Improvement Fund	2,500	0	2,500
<b>Total Family Housing</b>	<b>4,171,596</b>	<b>0</b>	<b>4,171,596</b>
<b>Total Military Construction and Family Housing:</b>	<b>9,480,475</b>	<b>342,465</b>	<b>9,822,940</b>



**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
(Dollars in Thousands)

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Alabama	Army	Anniston Depot	Powertrain Component Rebuilding Facility	23,690		23,690
Alabama	Army	Fort Rucker	Aircraft Maintenance Hangar		16,500	16,500
Alabama	National Guard	Centreville	Add/Alter Readiness Center (ADRS)	5,537		5,537
Alabama	National Guard	Clanton	Add/Alter Readiness Center (ADRS)	3,649		3,649
Alabama	National Guard	Oneonta	Add/Alter Readiness Center (ADRS)	4,527		4,527
Alabama	MDA	Huntsville	Construct Von Braun Complex (MDA), Phase 2	19,560		19,560
Alaska	Army	Fort Richardson	Sniper Field Fire Range	3,100		3,100
Alaska	Army	Fort Richardson	Digital Multipurpose Training Range	13,600		13,600
Alaska	Army	Fort Richardson	Barracks Complex	7,600		7,600
Alaska	Army	Fort Wainwright	Barracks Complex Renewal - Santiago Road	30,912		30,912
Alaska	Army	Fort Wainwright	Barracks Complex - Lorraine Road	39,815		39,815
Alaska	Army	Fort Wainwright	Combined Arms Collective Training Facility	21,732		21,732
Alaska	Air Force	Elmendorf AFB	Fitness Center	11,957		11,957
Alaska	Air Force	Elmendorf AFB	Flight Simulator Facility (C-17)	7,700		7,700
Alaska	Air Force	Elmendorf AFB	Support Utilities (C-17)	6,400		6,400
Alaska	Air Force	Elmendorf AFB	Large Aircraft Maintenance Hangar		28,000	28,000
Alaska	TRI CARE	Fort Wainwright	Replace Hospital, Phase 6	0		0
Arizona	Army	Fort Huachuca	Army Global Information Center		18,000	18,000
Arizona	Navy	Yuma	Bachelor Enlisted Quarters	18,740		18,740
Arizona	Navy	Yuma	Station Ordnance Area	7,930		7,930
Arizona	Air Force	Davis-Monthan AFB	Construct C-130 Squadron Operations (CSAR)	5,786		5,786
Arizona	Air Force	Davis-Monthan AFB	Hazardous Cargo Pad	4,243		4,243
Arizona	Air Force	Luke AFB	Dormitory (120 room)	10,000		10,000

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
(Dollars in Thousands)

<i>Location</i>	<i>Service/Agency</i>	<i>Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Arizona	National Guard		Camp Navajo	Qualification Training Range	3,000		3,000
Arkansas	Air Force		Little Rock AFB	Add/Alter Simulator Facility (C-130J)	5,031		5,031
Arkansas	National Guard		Camp Robinson	Army Aviation Support Facility	33,020		33,020
Arkansas	National Guard		Fort Chaffee	Ammunition Supply Point	13,798		13,798
Arkansas	Air National Guard		Fort Smith	Vehicle Maintenance & Aerospace Complex		6,000	6,000
California	Army		Sierra Army Depot	Extend Runway		13,600	13,600
California	Army		Fort Irwin	Command and Control Facility	21,000		21,000
California	Army		Fort Irwin	CIDC Field Operations Building	2,600		2,600
California	Army		Fort Irwin	Land Acquisition, Phase 2	14,500		14,500
California	Navy		Camp Pendleton	Tertiary Sewage Treatment, Phase 2	25,690		25,690
California	Navy		Camp Pendleton	Weight Handling Shop	6,630		6,630
California	Navy		Camp Pendleton	Bachelor Enlisted Quarters	19,975		19,975
California	Navy		Camp Pendleton	Consolidated Operations Center	4,910		4,910
California	Navy		Camp Pendleton	Close Combat Pistol Course	6,940		6,940
California	Navy		El Centro	Apron & Hangar Recapitalization, Phase 1	33,331		33,331
California	Navy		Recruit Depot, San	Replace General Warehouse		8,110	8,110
California	Air Force		Beale AFB	Upgrade Dock 2 (Global Hawk)	8,320		8,320
California	Air Force		Beale AFB	Add to Aircraft Generation Facility (Global Hawk)	1,866		1,866
California	Air Force		Edwards AFB	Add/Renovate Joint Strike Fighter Complex, Phase 2	9,965		9,965
California	Air Force		Travis AFB	Construct Utilities/Road (C-17)	12,844		12,844
California	Air Force		Travis AFB	Add Engine Storage Facility (C-17)	2,400		2,400
California	National Guard		Camp Parks	Readiness Center (ADRS)	11,318		11,318
California	Air Force Reserve		March AFB	Maintenance Hangar, Phase 2 (C-17)	7,400		7,400

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
**(Dollars in Thousands)**

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
California	Air Force Reserve	March AFB	Alter Hangar Tower (C-17)	2,089		2,089
California	Air National Guard	Fresno-Yosemite	Medical Training and Security Forces Complex		4,700	4,700
California	DLA	Travis AFB	Replace Hydrant Fuel System	15,100		15,100
California	SOCOM	Corona	SOF MOUT Training Complex	13,600		13,600
California	SOCOM	North Island	SOF Ground Mobility Support Building	1,000		1,000
Colorado	Army	Fort Carson	Digital Multipurpose Training Range	33,000		33,000
Colorado	Army	Fort Carson	Air Control Group Complex, Phase 1		12,400	12,400
Colorado	Army	Fort Carson	Barracks Complex - Hospital Area	14,108		14,108
Colorado	Army	Fort Carson	Multipurpose Machine Gun Range		3,650	3,650
Colorado	Air Force	Buckley AFB	Chapel Center	6,147		6,147
Colorado	Air Force	Buckley AFB	Child Development Center	6,100		6,100
Colorado	Army Reserve	Aurora	Add/Alter Military Equipment Package	1,758		1,758
Colorado	National Guard	Denver	Army Aviation Support Facility	21,000		21,000
Colorado	National Guard	Denver	Army Aviation Support Facility (Budget Amendment)	13,000		13,000
Colorado	National Guard	Fort Carson	Automated Qualification/Training Range	3,205		3,205
Colorado	Defense-Demil	Pueblo Depot	Ammunition Demilitarization Facility, Phase 5	44,792		44,792
Colorado	TRI CARE	Buckley AFB	Add/Alter Aeromedical Clinic	2,100		2,100
Connecticut	Navy	NSB New London	Upgrade Security at Gates 3 and 5		4,420	4,420
Connecticut	Navy	NSB New London	MK-10 Submarine Escape Trainer	17,100		17,100
Connecticut	Navy	NSB New London	Replace Pier 6	28,782		28,782
Delaware	Air Force	Dover AFB	Control Tower		9,500	9,500
Distr of Columbia	Navy	Anacostia	Atomic Clock Vault	3,239		3,239
Distr of Columbia	DIA	Bolling AFB	Upgrade HVAC for DIA Complex	6,000		6,000

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
(Dollars in Thousands)

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Florida	Navy	Eglin AFB	Construct Roads	2,060		2,060
Florida	Navy	Mayport	Airfield Control Tower	6,200		6,200
Florida	Air Force	Patrick AFB	Security Forces Operations Facility		8,800	8,800
Florida	Air Force	Tyndall AFB	Add to Operations Facility (F-22)	1,548	-1,548	-
Florida	Air Force	Tyndall AFB	Squadron Ops/Aircraft Maint Hangar (F-22)	17,414	-17,414	-
Florida	Navy Reserve	Jacksonville	Reserve Training Center	9,300		9,300
Florida	TRI CARE	Jacksonville	Add/Alter Hospital	28,438		28,438
Georgia	Army	Fort Benning	Physical Fitness Training Center	18,362		18,362
Georgia	Army	Fort Benning	Barracks Complex - Kelley Hill/Main Post	49,565		49,565
Georgia	Army	Fort Benning	Hazardous Cargo Loading Apron	3,850		3,850
Georgia	Army	Fort Gillem	Recruiting Brigade Operations Building	5,800		5,800
Georgia	Army	Fort McPherson	Child Development Center	4,900		4,900
Georgia	Army	Fort Stewart	Command And Control Facility	24,695		24,695
Georgia	Army	Fort Stewart	Tactical Equipment Complex	10,200		10,200
Georgia	Army	Fort Stewart	Chapel	9,500		9,500
Georgia	Army	Fort Stewart	Aircraft Maintenance Hanger (SOF)	21,100		21,100
Georgia	Army	Fort Stewart	Barracks Complex - 5th & 16th Street Phase 2	32,950		32,950
Georgia	Navy	Kings Bay	Enclave Fencing and Parking	16,000		16,000
Georgia	Air Force	Robins AFB	Aircraft Ramp	15,000		15,000
Georgia	Air Force	Moody AFB	Consolidated Base Support Center		9,600	9,600
Georgia	National Guard	Savannah	Army Aviation Support Facility	16,554		16,554
Georgia	SOCOM	Fort Stewart	SOF Battalion Operations Complex	17,600		17,600
Georgia	TRI CARE	Fort Benning	Consolidated Health Clinic	7,100		7,100

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
**(Dollars in Thousands)**

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Guam	Navy	Guam	Kilo Wharf Improvements	12,500		12,500
Guam	Navy	Guam	Upgrade Water Treatment Plant	20,700		20,700
Guam	Air Force	Andersen AFB	War Reserve Storage Facility	19,593		19,593
Guam	DODEA	NAS Agana	Guam High School Replacement	26,964		26,964
Guam	SOCOM	Guam	SOF Ground Mobility Support Building	2,200		2,200
Hawaii	Army	Helemano	Upgrade Drum Road, Phase 1	27,000		27,000
Hawaii	Army	Helemano	Tank Trails - Helemano	7,300		7,300
Hawaii	Army	Hickam AFB	Hot Cargo Pad Expansion	11,200		11,200
Hawaii	Army	Pohakuloa	West PTA Modifications	30,000		30,000
Hawaii	Army	Pohakuloa	Saddle Road, Phase 2 (DAR)		10,000	10,000
Hawaii	Army	Schofield Barracks	Barracks Complex Renewal - Capron Ave Ph 3	48,000		48,000
Hawaii	Army	Schofield Barracks	Fire Station	4,800		4,800
Hawaii	Army	Schofield Barracks	Barracks Complex - Quad E, Phase 2	36,000		36,000
Hawaii	Army	Schofield Barracks	Combined Arms Collective Training Facility	32,542		32,542
Hawaii	Army	Schofield Barracks	Tactical Vehicle Wash Facility	3,500		3,500
Hawaii	Army	Schofield Barracks	Vehicle Maintenance Facility Phase 1	49,000		49,000
Hawaii	Army	Schofield Barracks	Qualification Training Range	4,950		4,950
Hawaii	Army	Schofield Barracks	Battle Area Live Fire Complex	32,000		32,000
Hawaii	Army	Wheeler AFB	Deployment Facility	24,000		24,000
Hawaii	Air Force	Hickam AFB	Alter Maintenance/Supply Areas (C-17)	9,000		9,000
Hawaii	Air Force	Hickam AFB	Support Utilities, Phase 2 (C-17)	2,450		2,450
Hawaii	Air Force	Hickam AFB	Clear Water Rinse (C-17)	4,300		4,300
Hawaii	Air Force	Hickam AFB	Maintenance Shop Facility (C-17)	8,200		8,200

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
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<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Hawaii	Air Force	Hickam AFB	Munitions Storage (C-17)	1,950		1,950
Hawaii	Air Force	Hickam AFB	Upgrade Electrical Distribution System, Ph 2		8,500	8,500
Hawaii	Air Force	Maui Site	AEOS Primary Mirror Coating Facility		7,500	7,500
Hawaii	DLA	Pearl Harbor	Multi-Product Interface Tank	3,500		3,500
Idaho	Air National Guard	Gowen Field	ADAL Base Supply Complex		3,500	3,500
Illinois	Navy	Great Lakes	Battle Station Training Facility Phase 2	58,200		58,200
Illinois	Navy	Great Lakes	Recruit Training Command Barracks	35,920		35,920
Illinois	Navy	Great Lakes	Recruit Training Command Barracks	38,851		38,851
Illinois	National Guard	Springfield	Total Army School System Facility	13,596		13,596
Illinois	National Guard	Galesburg	Readiness Center		4,000	4,000
Indiana	National Guard	Remington	Add/Alter Readiness Center (ADRS)	1,458		1,458
Indiana	National Guard	Gary	Armed Forces Reserve Center		9,380	9,380
Iowa	National Guard	Camp Dodge	Company Grade Quarters		3,485	3,485
Kansas	Army	Fort Leavenworth	Lewis & Clark Instructional Facility Phase 2	44,000		44,000
Kansas	Army	Fort Riley	AFS Technical Maintenance Facility		15,500	15,500
Kansas	Army	Fort Riley	Barracks Complex Renewal	41,000		41,000
Kansas	Army	Fort Riley	Communications Center	3,050		3,050
Kansas	Army Reserve	Hays	Army Reserve Center/Organizational Maint Shop	7,451		7,451
Kansas	National Guard	Topeka	Add/Alter Readiness Center (ADRS)	3,086		3,086
Kentucky	Army	Fort Knox	Construct Shoot House		1,850	1,850
Kentucky	Army	Fort Knox	Construct Urban Assault Course		1,900	1,900
Kentucky	Army	Fort Campbell	Airfield Vehicle Support Facility		2,400	2,400
Kentucky	Army	Fort Campbell	Command And Control Facility	33,000		33,000

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
**(Dollars in Thousands)**

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Kentucky	Army	Fort Campbell	Barracks Complex - 42nd St/Indiana Ave Phase 1	30,000		30,000
Kentucky	Army	Fort Campbell	Shoot House	1,600		1,600
Kentucky	Army	Fort Knox	Basic Combat Training Complex 1 Phase 1	50,000		50,000
Kentucky	Defense-Demil	Blue Grass Depot	Ammunition Demilitarization Facility Ph 5	37,094		37,094
Kentucky	SOCOM	Fort Campbell	Aquatic Training Facility, SOAR		3,500	3,500
Louisiana	Army	Fort Polk	Pallet Processing Facility	8,800		8,800
Louisiana	Army	Fort Polk	Ammunition Supply Point Upgrade	7,500		7,500
Louisiana	Army	Fort Polk	Hazardous Cargo Loading Apron	14,503		14,503
Louisiana	Army	Fort Polk	Passenger Processing Facility	11,700		11,700
Louisiana	Army	Fort Polk	Fixed Wing Aircraft Parking Apron	25,000		25,000
Louisiana	Army	Fort Polk	Urban Assault Course	3,450		3,450
Louisiana	Air Force	Barksdale AFB	Dormitory (168 Room)	13,800		13,800
Louisiana	National Guard	Camp Beauregard	Army Aviation Support Facility	15,738		15,738
Louisiana	Air Force Reserve	Barksdale AFB	Operations Facility, 93rd Squadron		5,300	5,300
Maine	Navy	NAS Brunswick	Replace Weapons Magazine		4,690	4,690
Maine	Navy	Portsmouth NS	Acoustic Test and Calibration Facility		7,860	7,860
Maryland	Army	Aberdeen PG	Chemical and Bio Sample Reception Facility		13,000	13,000
Maryland	Navy	Indian Head	Agile Chemical Facility	13,900		13,900
Maryland	Air Force	Andrews AFB	ASA-Alter Aircraft Support Facilities	5,000		5,000
Maryland	Air Force	Andrews AFB	ASA-Fighter Aircraft Alert Complex	11,000		11,000
Maryland	Air Force	Andrews AFB	ASA-Munitions Storage Igloo	1,100		1,100
Maryland	Army Reserve	Fort Meade	Army Reserve Center/OMS/Warehouse Phase 2	14,642		14,642
Maryland	NSA	Fort Meade	Reconfigured Chilled Water Phase 2	3,417		3,417

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
(Dollars in Thousands)

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Maryland	NSA	Fort Meade	NSA Deep Wells	8,140		8,140
Maryland	NSA	Fort Meade	Critical Communications Path	3,450		3,450
Massachusetts	Air National Guard	Otis ANGB	Eliminate Airfield Obstructions	4,000		4,000
Massachusetts	Air Force Reserve	Westover ARB	Base Operations Facility		4,400	4,400
Michigan	National Guard	Grandledge	Army Aviation Support Facility	18,200		18,200
Michigan	National Guard	Grandledge	Army Aviation Spt Facility (Budget Amendment)	9,400		9,400
Michigan	Air National Guard	Selfridge ANGB	Joint Security Forces Facility		9,700	9,700
Michigan	Air National Guard	Kellogg Field	Fire Crash Rescue Station		5,100	5,100
Michigan	Air National Guard	Alpena	Squadron Operations Training Facility		8,500	8,500
Minnesota	Air National Guard	Duluth IAP	Construct Arm, Dearm Apron, Taxiway (ASA)	4,000		4,000
Minnesota	Air National Guard	Duluth IAP	Relocate Base Entrance Road (ASA)	3,500		3,500
Minnesota	Air National Guard	Duluth IAP	Construct Crew Quarters (ASA)	3,000		3,000
Minnesota	Air Force Reserve	Minneapolis St Paul	Joint Security Forces Building		4,950	4,950
Mississippi	Navy	Gulfpfort	Vehicle Maintenance Facility		4,350	4,350
Mississippi	National Guard	Gulfpfort	Organizational Maintenance Shop		4,650	4,650
Mississippi	Air Force	Columbus AFB	Fire Crash Rescue Station		7,700	7,700
Mississippi	SOCOM	Stennis Space Center	Combatant Craft Operations Facility		6,000	6,000
Missouri	Army	Fort Leonard Wood	WMD Responder Training Facility	15,000		15,000
Missouri	Army	Fort Leonard Wood	Upgrade Training Range	2,750		2,750
Missouri	Army	Fort Leonard Wood	Countermine Training Complex, Phase 1		10,400	10,400
Montana	Air Force	Malmstrom AFB	Construct Corrosion Control/AGE Facility		5,600	5,600
Montana	National Guard	Helena	Army Aviation Spt Facility, Ph 1 (Budget Amend)	7,600		7,600
Montana	National Guard	Dillon	Readiness Center		4,786	4,786



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Montana	National Guard		Havre AS	Add/Alter Readiness Center (ADRS)	2,398		2,398
Nebraska	Air Force		Offutt AFB	Replace Control Tower		6,721	6,721
Nebraska	National Guard		Hastings	Modified Record Fire Range	1,487		1,487
Nevada	Navy		NAS Fallon	High Explosive Magazine		4,980	4,980
Nevada	National Guard		Henderson	Readiness Center		12,853	12,853
New Hampshire	Air National Guard		Pease ANGB	Repair Aircraft Parking Ramp		4,900	4,900
New Jersey	Navy		Earle	General Purpose/Berthing Pier (Phase 2)	49,200		49,200
New Jersey	Air National Guard		Atlantic City IAP	Replace Alert Complex (ASA)	10,400		10,400
New Mexico	Air Force		Cannon AFB	Dining Facility		9,500	9,500
New Mexico	Army		White Sands	Electromagnetic Vulnerability Assessment	33,000		33,000
New York	Army		Buffalo	Military Entrance Processing Station	6,200		6,200
New York	Army		Fort Drum	Defensive Live Fire Range		3,000	3,000
New York	Army		Fort Drum	Barracks Complex-Wheeler Sack AAF, Phase 2	48,000		48,000
New York	Army		Fort Drum	Airfield Arrival/Departure Facility	4,950		4,950
New York	Army		Fort Hamilton	Military Police Station	7,600		7,600
New York	Army		U.S. Military Academy	Library & Learning Center, Phase 1	34,500		34,500
New York	National Guard		Auburn	Organizational Maintenance Shop (ADRS)	2,472		2,472
New York	National Guard		Auburn	Readiness Center, Addition (ADRS)	4,406		4,406
New York	National Guard		Fort Drum	Readiness Center (ADRS)	6,489		6,489
New York	National Guard		Kingston	Organizational Maintenance Shop (ADRS)	3,827		3,827
New York	National Guard		Utica	Readiness Center Addition (ADRS)	5,704		5,704
North Carolina	Army		Fort Bragg	Barracks Complex Renewal - Blackjack St, Ph 1	49,000		49,000
North Carolina	Army		Fort Bragg	Barracks Complex-Bastogne Drive, Phase 2	48,000		48,000

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North Carolina	Army	Fort Bragg	Barracks Complex-Donovan Street, Phase 5	15,500		15,500
North Carolina	Army	Fort Bragg	Air Traffic Control Tower	2,500		2,500
North Carolina	Army	Fort Bragg	Construct Shoot House (SOF)	2,037		2,037
North Carolina	Army	Fort Bragg	Construct Shoot House (18th Airborne Corps)	1,650		1,650
North Carolina	Navy	Camp Lejeune	Construct Armory, Camp Geiger	4,010		4,010
North Carolina	Navy	Camp Lejeune	Construct Combat Training Pool	2,410		2,410
North Carolina	Navy	Camp Lejeune	Reserve Training Center		7,000	7,000
North Carolina	Navy	Camp Lejeune	Add To Simulator Building	2,270		2,270
North Carolina	Navy	New River	Bachelor Enlisted Quarters	20,780		20,780
North Carolina	Navy	New River	Aircraft Maintenance Training Facility	12,090		12,090
North Carolina	Navy	Washington County	Outlying Landing Field Facilities, Phase 2	33,900		33,900
North Carolina	Navy	Washington County	Acquire Land, Outlying Landing Field, Phase 1	61,750		61,750
North Carolina	Air Force	Pope AFB	Combat Controller School Expansion	12,950		12,950
North Carolina	Air Force	Pope AFB	Indoor Firing Range for CC School	2,200		2,200
North Carolina	National Guard	Burlington	Add/Alter Readiness Center (ADRS)	1,360		1,360
North Carolina	National Guard	Fort Bragg	Regional Training Institute, Phase 3	6,319		6,319
North Carolina	National Guard	Windsor	Organizational Maintenance Shop (ADRS)	2,409		2,409
North Carolina	National Guard	Lenoir	Organizational Maintenance Shop		3,000	3,000
North Carolina	Air Force Reserve	Seymour Johnson AFB	Reserve Security Forces Operations	2,300		2,300
North Carolina	Navy Reserve	Asheville	Reserve Center	3,492		3,492
North Carolina	DLA	MCAS Cherry Point	Replace Fuel Hydrant System	22,700		22,700
North Carolina	SOCOM	Fort Bragg	SOF Company Operations Complex	12,000		12,000
North Carolina	SOCOM	Fort Bragg	SOF Renovate Kennedy Hall	11,988		11,988

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North Carolina	SOCOM	Fort Bragg	SOF Company Operations Facility	4,500		4,500
North Carolina	SOCOM	Fort Bragg	SOF Company Operations Building	4,600		4,600
North Carolina	SOCOM	Fort Bragg	SOF Isolation Unit Training Facility	8,300		8,300
North Carolina	SOCOM	Fort Bragg	SOF Resistance Training Facility	1,500		1,500
North Dakota	Air Force	Minot AFB	Add/Alter Dock 1 Hangar		9,900	9,900
Ohio	Air Force	Wright-Patterson AFB	Replace Steam Lines/Tunnels, Area B, Phase 1		9,200	9,200
Ohio	Air Force Reserve	Wright-Patterson AFB	Multi-Purpose Hangar (C-5)	16,821		16,821
Ohio	Air Force Reserve	Wright-Patterson AFB	Airfield Pavements (C-5), Phase 1	4,300		4,300
Ohio	National Guard	Columbus	Organizational Maintenance Shop (ADRS)	2,225		2,225
Ohio	DLA	Columbus	Replace Physical Fitness Facility	5,500	-5,500	-
Oklahoma	Army	Fort Sill	Vehicle Maintenance Facility	14,400		14,400
Oklahoma	Army	Fort Sill	Consolidated Maintenance Complex, Phase 3	13,100		13,100
Oklahoma	Air Force	Altus AFB	Base Civil Engineering Complex, Phase 2		10,500	10,500
Oklahoma	Air Force	Tinker AFB	Add to Integration Support Facility		8,000	8,000
Oklahoma	DLA	Tinker AFB	Add/Alter Hydrant Fuel System	5,400		5,400
Oregon	Air Force Reserve	Portland	Maintenance Hangar & Pavements	12,400		12,400
Oregon	Air Force Reserve	Portland	Consolidated Training, Phase 2	3,800		3,800
Oregon	Air Force Reserve	Portland	Add/Alter Building 315 (PJ Squadron Operations)	1,640		1,640
Oregon	National Guard	Eugene	Armed Forces Reserve Center, Phase 2	12,635		12,635
Pennsylvania	Army	Letterkenny Depot	Upgrade Igloos		11,400	11,400
Pennsylvania	Army Reserve	Fort Indiantown Gap	Army Reserve Center/OMS	13,156		13,156
Pennsylvania	Navy Reserve	Willow Grove	Fitness Center	7,700		7,700
Pennsylvania	DLA	New Cumberland Depot	Consolidated Maintenance Facility	22,300		22,300

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Puerto Rico	Army Reserve	Aguadilla	Army Reserve Center	21,523	-21,523	-
Rhode Island	Navy	NAS Newport	Construct Fuel Oil Storage System		5,490	5,490
Rhode Island	Navy	NAS Newport	Add/Alter Naval Justice School		3,590	3,590
South Carolina	Air Force	Shaw AFB	Sewer Outfall Line To Wateree River	3,300		3,300
South Carolina	National Guard	Charleston	Readiness Center		10,358	10,358
South Carolina	TRJ CARE	Parris Island	Medical/Dental Clinic Replacement	25,000		25,000
South Dakota	Air Force	Ellsworth AFB	Base Operations Center		11,800	11,800
South Dakota	National Guard	Mobridge	Readiness Center	2,944		2,944
South Dakota	Air National Guard	Joe Foss Field	Squadron Operations Facility		7,000	7,000
Tennessee	Air Force	Arnold AFB	Upgrade Jet Engine Air Induction Systems, Ph 5	22,000		22,000
Tennessee	National Guard	Nashville	Readiness Center, Phase 1		9,142	9,142
Tennessee	National Guard	Smyrna	Joint Forces Reserve Center		13,589	13,589
Tennessee	Air National Guard	Memphis IAP	Parking Apron & Hydrant System (C-5)	15,500		15,500
Tennessee	Air National Guard	Memphis IAP	Corrosion Control Hangar (C-5)	26,000		26,000
Texas	Army	Fort Bliss	Missile Defense Instruction Facility	16,500		16,500
Texas	Army	Fort Bliss	CIDC Field Operations Building		3,600	3,600
Texas	Army	Fort Hood	Barracks Complex	49,888		49,888
Texas	Army	Fort Hood	Digital Multipurpose Range	28,200		28,200
Texas	Army	Fort Sam Houston	Construct General Instruction Building		11,400	11,400
Texas	Air Force	Lackland AFB	Security Forces Training Expansion	2,596		2,596
Texas	Air Force	Dyess AFB	Construct Fire/Crash Rescue Station		11,000	11,000
Texas	Air Force	Sheppard AFB	Technical Training Facility (F-22)	21,284		21,284
Texas	Air Force	Sheppard AFB	Student Dormitory (300 Room)	29,000		29,000

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Texas	Air Force Reserve	Lackland AFB	Add/Alter Aircraft Generation Facility (C-5)	1,200		1,200
Texas	Air Force Reserve	Lackland AFB	Training Schoolhouse Complex (C-5)	20,000		20,000
Texas	Air Force Reserve	Lackland AFB	Training Load Assembly Facility (C-5)	1,850		1,850
Texas	DLA	Kingsville	Replace Jet Fuel Storage Tank	3,900		3,900
Utah	Air Force	Hill AFB	ICBM Propellant Analysis Complex		7,700	7,700
Utah	Air Force	Hill AFB	Fitness Center	13,113		13,113
Utah	Army Reserve	Ogden	Add/Alter Army Reserve Center	7,932		7,932
Vermont	Air National Guard	Burlington	Composite Deployment Training Facility		6,000	6,000
Virginia	Army	Fort A.P. Hill	Construct Shoot House	3,975		3,975
Virginia	Army	Fort A.P. Hill	MOUT Facility, Ph 1		10,800	10,800
Virginia	Army	Fort Myer	Barracks Complex-Sheridan Ave, Phase 1	49,526		49,526
Virginia	Navy	Camp Elmore	Command Operations Facility	13,500		13,500
Virginia	Navy	NAB Little Creek	Gate 5 Security Improvements	2,850		2,850
Virginia	Navy	NAS Oceana	Post 2 Security Improvements	2,770		2,770
Virginia	Navy	Norfolk	Pier 11 Replacement, Phase 2	40,000		40,000
Virginia	Navy	Norfolk	Gate 5 Security Improvements	4,330		4,330
Virginia	Navy	Quantico	Green Side Hangar Complex	21,180		21,180
Virginia	Navy	Quantico	Basic School Headquarters		4,470	4,470
Virginia	Navy	Quantico	Bachelor Enlisted Quarters	15,090		15,090
Virginia	Navy	Quantico	Improve Heritage Center Road	950		950
Virginia	Navy	Quantico	Construct Armory for The Basic School	4,580		4,580
Virginia	Navy	Yorktown	Ordnance Handling Vehicle Maintenance Shop	9,870		9,870
Virginia	National Guard	Fort Pickett	Infantry Platoon Battle Course	5,170		5,170

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Virginia	National Guard	Fort Pickett	MOUT Assault Course	1,409		1,409
Virginia	Navy Reserve	Norfolk	Vehicle Maintenance Facility	3,290		3,290
Virginia	DLA	NAS Oceana	Bulk Fuel Storage Tank	3,589		3,589
Virginia	DLA	Richmond Depot	Security Enhancements	6,500		6,500
Virginia	DLA	Richmond Depot	Conference Center	3,600		3,600
Virginia	SOCOM	Dam Neck	SOF High Explosive Magazine	1,400		1,400
Virginia	SOCOM	Dam Neck	SOF Add to Operational Trainer Support Facility	4,300		4,300
Virginia	SOCOM	Fort A.P. Hill	SOF Ground Mobility Support Building	1,500		1,500
Virginia	SOCOM	NAB Little Creek	SEAL Team Operations Center		9,000	9,000
Virginia	SOCOM	NAB Little Creek	SOF Ground Mobility Maintenance Facility	1,000		1,000
Virginia	SOCOM	NAB Little Creek	SOF Combat Skills Compound	12,700		12,700
Virginia	SOCOM	NAB Little Creek	SOF Special Boat Operations Support Facility	10,500		10,500
Virginia	TRI CARE	Fort Belvoir	Hospital Replacement Phase 1	43,000		43,000
Virginia	TRI CARE	Langley AFB	Add/Alter Hospital	50,800		50,800
Washington	Army	Fort Lewis	Barracks Complex - 41st Div Dr/B St, Phase 2	48,000		48,000
Washington	Army	Fort Lewis	Construct Chapel, North Fort		9,200	9,200
Washington	Navy	Bangor	LA Production & Storage Complex	35,770		35,770
Washington	Navy	Bremerton	Bachelor Enlisted Quarters - Shipboard Ashore	34,125		34,125
Washington	Navy	Puget Sound	Aircraft Carrier Maintenance Complex	20,305		20,305
Washington	National Guard	Camp Murray ANG	Add/Alter Readiness Center (ADRS)	1,400		1,400
Washington	Army Reserve	Vancouver	Land Acquisition	2,500	-2,500	-
West Virginia	Air National Guard	Martinsburg	Maintenance Hangar and Shops (C-5)	36,000		36,000

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West Virginia	Air National Guard	Martinsburg	Construct C-5 Aircraft Apron/Fuel Hydr Sys, Ph 2		17,000	17,000
West Virginia	Air National Guard	Martinsburg	Flight Simulator Facility (C-5)		4,150	4,150
West Virginia	Air National Guard	Yeager	Fire Crash Rescue Station		6,000	6,000
Wisconsin	Air National Guard	Truax Field	Munitions Maintenance/Storage Complex (ASA)	5,900		5,900
Wisconsin	Air National Guard	Volk Field	Replace Joint Squadron Ops Facility		4,500	4,500
Wisconsin	Army Reserve	Fort McCoy	Infantry Platoon Battle Course	2,712		2,712
Wisconsin	Army Reserve	Fort McCoy	Squad Defense Range	1,248		1,248
Worldwide	Navy	Unspecified	White Side Complex	18,560		18,560
Worldwide	Navy	Unspecified	Presidential Helicopter Program Spt Facility	80,000	-80,000	-
Worldwide	Air Force	Unspecified	Predator B Beddown	26,121		26,121
<i><b>Overseas and Classified</b></i>						
Bahamas	Navy	Andros Island	Bachelor Quarters	20,750	-20,750	
Diego Garcia	Navy	Diego Garcia	Solid Waste Management Center	17,500		17,500
Diego Garcia	TRI CARE	Diego Garcia	Dental Clinic Replacement	3,800		3,800
Germany	Air Force	Ramstein AB	Small Diameter Bomb Facilities	1,200		1,200
Germany	Air Force	Ramstein AB	Theater Air Operations Support Center	24,204		24,204
Germany	Army	Grafenwoehr	Brigade Support Complex	14,700		14,700
Germany	Army	Grafenwoehr	Barracks Complex	28,500		28,500
Germany	Army	Grafenwoehr	Barracks Complex - Brigade	34,000		34,000
Germany	DODEA	Grafenwoehr	New Elementary/Middle School	36,247		36,247
Germany	DODEA	Vilseck	Vilseck High School Renovation/Addition	9,011		9,011

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Germany	TRI CARE	Grafenwoehr	Dispensary/Dental Clinic Add/Alter	13,000		13,000
Greenland	Air Force	Thule AB	Replace Dormitory (72 Room)	19,800		19,800
Italy	Air Force	Aviano AB	Add/Alter Weapons Load/Maint Training Facility	2,300		2,300
Italy	Air Force	Aviano AB	Expand North Ramp Phase 2	1,626		1,626
Italy	Air Force	Aviano AB	Flight Simulator	2,834		2,834
Italy	Army	Livorno	Warehouse Operations Facility	26,000		26,000
Italy	Navy	Sigonella	Access Improvements	7,430		7,430
Italy	Navy	Sigonella	Base Operations Support, Phase 2	15,120		15,120
Japan	Air Force	Misawa AB	Expand Strategic Airlift Ramp	6,700	-6,700	-
Japan	DLA	Misawa AB	Hydrant Fuel System	19,900	-19,900	-
Korea	Air Force	Kunsan AB	Dormitory (144 room)	18,550		18,550
Korea	Air Force	Kunsan AB	Dormitory (144 room)	18,550		18,550
Korea	Air Force	Osan AB	Dormitory (156 room)	18,600		18,600
Korea	Army	Camp Humphreys	Sanitary Sewer System	12,000		12,000
Portugal	Air Force	Lajes Field	Add/Alter Fitness Center, Phase 2	5,689		5,689
Portugal	DLA	Lajes Field	Replace Hydrant Fuel System	19,113		19,113
Spain	Air Force	NS Rota	Aircraft Parking Apron, Phase 2	14,153	-14,153	-
Spain	Navy	NS Rota	Command Operations Consolidation	32,700	-32,700	-
United Kingdom	Air Force	RAF Lakenheath	4-Bay Mission Training Center	5,500		5,500
United Kingdom	SOCOM	RAF Mildenhall	SOF Operations/Intelligence Facility	10,200	-10,200	
Classified	Air Force	Classified Location	Special Tactical Unit Detachment Facility	704		704
Classified	Air Force	Classified Location	Classified	28,090		28,090
Classified	SOCOM	Classified Location	SOF Add to Information Operations Facility	4,800		4,800



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Classified	SOCOM	Classified Location	SOF Building Addition	2,600		2,600
Worldwide	SOCOM	Unspecified Worldwide	SOF Training Facility	2,900		2,900
Worldwide	NATO	Unspecified Locations	NATO Security Investment Program	165,800		165,800
<u><b>Unspecified Accounts</b></u>						
Worldwide	Army	Unspecified Worldwide	Unspecified Minor Construction	20,000		20,000
Worldwide	Army	Unspecified Worldwide	Planning & Design	130,335	3,000	133,335
Worldwide	Army	Unspecified Worldwide	Host Nation Support	21,000		21,000
Worldwide	National Guard	Unspecified Worldwide	Unspecified Minor Construction	4,472		4,472
Worldwide	National Guard	Unspecified Worldwide	Planning & Design	30,845	530	31,375
Worldwide	Army Reserve	Unspecified Worldwide	Unspecified Minor Construction	2,923		2,923
Worldwide	Army Reserve	Unspecified Worldwide	Planning & Design	11,225		11,225
Worldwide	Army Reserve	Unspecified Worldwide	Planning & Design	12,000		12,000
Worldwide	Navy	Unspecified Worldwide	Unspecified Minor Construction	72,709		72,709
Worldwide	Navy	Various Worldwide	Planning & Design	14,358		14,358
Worldwide	Navy	Various Worldwide	Planning & Design (USMC)	1,095		1,095
Worldwide	Navy Reserve	Unspecified Worldwide	Planning & Design	408		408
Worldwide	Navy Reserve	Various Worldwide	Planning & Design (USMCR)			
Worldwide	Air Force	Unspecified Worldwide	Unspecified Minor Construction	13,000		13,000
Worldwide	Air Force	Unspecified Worldwide	Planning & Design	140,786	-16,701	124,085
Worldwide	Air National Guard	Unspecified Worldwide	Unspecified Minor Construction	5,500		5,500
Worldwide	Air National Guard	Unspecified Worldwide	Planning & Design	13,568		13,568
Worldwide	Air Force Reserve	Unspecified Worldwide	Unspecified Minor Construction	5,263		5,263
Worldwide	Air Force Reserve	Various Worldwide	Planning & Design	5,493		5,493

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Worldwide	Defense Level	Unspecified Worldwide	Unspecified Minor Construction	3,000		3,000
Worldwide	Defense Level	Unspecified Worldwide	Planning & Design	22,216		22,216
Worldwide	Defense Level	Unspecified Worldwide	Contingency Construction	10,000		10,000
Worldwide	Defense Level	Unspecified Worldwide	Energy Conservation Improvement Program	60,000		60,000
Worldwide	SOCOM	Unspecified Worldwide	Unspecified Minor Construction	2,710		2,710
Worldwide	SOCOM	Unspecified Worldwide	Planning & Design	10,566		10,566
Worldwide	JCS	Unspecified Worldwide	Unspecified Minor Construction	7,214		7,214
Worldwide	TRI CARE	Unspecified Worldwide	Unspecified Minor Construction	3,002		3,002
Worldwide	TRI CARE	Various Worldwide	Planning & Design	29,400		29,400
Worldwide	DFAS	Unspecified Worldwide	Unspecified Minor Construction	1,497		1,497
Worldwide	DODEA	Unspecified Worldwide	Unspecified Minor Construction	746		746
Worldwide	MDA	Unspecified Worldwide	Unspecified Minor Construction	2,769		2,769
Worldwide	Army	BRAC, Army	Base Realignment & Closure	100,305		100,305
Worldwide	Navy	BRAC, Navy	Base Realignment & Closure	0		0
Worldwide	Air Force	BRAC, Air Force	Base Realignment & Closure	145,811		145,811
<b>Total Military Construction: 5,308,879</b>						<b>5,651,344</b>
<b><u>Housing Construction</u></b>						
Alaska	Army	Fort Richardson	Family Housing Replacements (92 units)	42,000		42,000
Alaska	Army	Fort Wainwright	Family Housing Construction (100 units)	41,000		41,000
Alaska	Army	Fort Wainwright	Family Housing Replacement (60 units)	37,000		37,000
Alaska	Army	Fort Wainwright	Family Housing Replacement (86 units)	46,000		46,000
Arizona	Air Force	Davis-Monthan AFB	Replace Family Housing Phase 6 (250 units)	48,500		48,500

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Arizona	Army		Fort Huachuca	Family Housing Replacement (205 units)	41,000		41,000
Arizona	Army		Yuma	Family Housing Replacement (55 units)	14,900		14,900
California	Air Force		Edwards AFB	Replace Family Housing (218 units)	41,202		41,202
California	Air Force		Vandenberg AFB	Replace Family Housing Phase 8 (120 units)	30,906		30,906
Florida	Air Force		MacDill AFB	Replace Family Housing Phase 6 (61 units)	21,723		21,723
Florida	Air Force		MacDill AFB	Construct Housing Maintenance Facility	1,250		1,250
Idaho	Air Force		Mountain Home AFB	Replace Family Housing Phase 6 (147 units)	39,333		39,333
Kansas	Army		Fort Riley	Family Housing Replacement (126 units)	33,000		33,000
Mississippi	Air Force		Columbus AFB	Family Housing Management Facility	711		711
Missouri	Air Force		Whiteman AFB	Replace Family Housing Phase 6 (160 units)	37,087		37,087
Montana	Air Force		Malmstrom AFB	Replace Family Housing (115 units)	29,910		29,910
New Mexico	Army		White Sands	Family Housing Replacement (156 units)	31,000		31,000
North Carolina	Navy		MCAS Cherry Point	Slocum Village Replacement Phase 3 (198 units)	27,002		27,002
North Carolina	Air Force		Seymour Johnson AFB	Replace Family Housing Phase 8 (167 units)	32,693		32,693
North Dakota	Air Force		Grand Forks AFB	Replace Family Housing Phase H (90 units)	26,169		26,169
North Dakota	Air Force		Minot AFB	Replace Family Housing Phase 11 (142 units)	37,087		37,087
Oklahoma	Army		Fort Sill	Family Housing Replacement (247 units)	47,000		47,000
South Carolina	Air Force		Charleston AFB	Construct Huntley Park Fire Station	1,976		1,976
South Dakota	Air Force		Ellsworth AFB	Replace Family Housing Phase 4 (75 units)	21,482		21,482
Texas	Air Force		Dyess AFB	Replace Family Housing Phase 5 (127 units)	28,664		28,664
Texas	Air Force		Goodfellow AFB	Construct Military Family Housing Phase 1 (127 units)	20,604		20,604
Virginia	Army		Fort Lee	Family Housing Replacement (218 units)	46,000		46,000
Virginia	Army		Fort Monroe	Family Housing Replacement (68 units)	16,000		16,000

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
(Dollars in Thousands)

<i>Location</i>	<i>Service/Agency</i>	<i>Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Germany	Air Force		Ramstein AB	Replace Family Housing (144 units)	57,691		57,691
Italy	Air Force		Aviano AB	Replace Housing Office	2,542		2,542
Korea	Air Force		Osan AB	Construct Family Housing Phase 3 (117 units)	46,834		46,834
United Kingdom	Air Force		RAF Lakenheath	Replace Family Housing (154 units)	43,976		43,976
Worldwide	Army		Unspecified Worldwide	Housing Planning & Design	29,209		29,209
Worldwide	Army		Unspecified Worldwide	Housing Construction Improvements	211,990		211,990
Worldwide	Navy		Unspecified Locations	Housing Construction Improvements	112,105		112,105
Worldwide	Air Force		Unspecified Locations	Housing Construction Improvements	238,353		238,353
Worldwide	Air Force		Unspecified Locations	Housing Planning & Design	38,266		38,266
Worldwide	Defense Level		Unspecified Worldwide	Family Housing Improvement Fund	2,500		2,500
Worldwide	NSA		Unspecified Worldwide	Housing Construction Improvements	49		49
<b><u>Housing Operations and Debt Accounts</u></b>							
Worldwide	Army		Unspecified Worldwide	Utilities Account	132,356		132,356
Worldwide	Army		Unspecified Worldwide	Services Account	36,174		36,174
Worldwide	Army		Unspecified Worldwide	Management Account	74,895		74,895
Worldwide	Army		Unspecified Worldwide	Miscellaneous Account	1,333		1,333
Worldwide	Army		Unspecified Worldwide	Furnishings Account	37,411		37,411
Worldwide	Army		Unspecified Worldwide	Leasing	218,033		218,033
Worldwide	Army		Unspecified Worldwide	Maintenance of Real Property	402,060		402,060
Worldwide	Army		Unspecified Worldwide	Mortgage Insurance Premium	1		1
Worldwide	Army		Unspecified Worldwide	Privatization Support Costs	26,644		26,644
Worldwide	Navy		Unspecified Locations	Utilities Account	137,226		137,226

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
**(Dollars in Thousands)**

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Worldwide	Navy	Unspecified Locations	Management Account	81,859		81,859
Worldwide	Navy	Unspecified Locations	Furnishings Account	20,756		20,756
Worldwide	Navy	Unspecified Locations	Miscellaneous Account	654		654
Worldwide	Navy	Unspecified Locations	Services Account	57,691		57,691
Worldwide	Navy	Unspecified Locations	Leasing	136,883		136,883
Worldwide	Navy	Unspecified Locations	Maintenance of Real Property	252,383		252,383
Worldwide	Navy	Unspecified Locations	Mortgage Insurance Premium	61		61
Worldwide	Navy	Unspecified Locations	Privatization Support Costs	16,991		16,991
Worldwide	Navy	Unspecified Locations	Utilities Account	125,459		125,459
Worldwide	Air Force	Unspecified Locations	Management Account	70,680		70,680
Worldwide	Air Force	Unspecified Locations	Services Account	26,070		26,070
Worldwide	Air Force	Unspecified Locations	Furnishings Account	44,459		44,459
Worldwide	Air Force	Unspecified Locations	Miscellaneous Account	2,396		2,396
Worldwide	Air Force	Unspecified Locations	Leasing	119,908		119,908
Worldwide	Air Force	Unspecified Locations	Maintenance of Real Property	435,782		435,782
Worldwide	Air Force	Unspecified Locations	Mortgage Insurance Premium	38		38
Worldwide	Air Force	Unspecified Locations	Privatization Support Costs	39,104		39,104
Worldwide	DLA	Unspecified Worldwide	Utilities Account	419		419
Worldwide	DLA	Unspecified Worldwide	Furnishings Account	36		36
Worldwide	DLA	Unspecified Worldwide	Services Account	76		76
Worldwide	DLA	Unspecified Worldwide	Management Account	293		293
Worldwide	DLA	Unspecified Worldwide	Maintenance of Real Property	397		397
Worldwide	DIA	Unspecified Worldwide	Furnishings Account	3,925		3,925

**FY 2005 Authorization of Appropriations for Military Construction and Family Housing**  
**(Dollars in Thousands)**

<i>Location</i>	<i>Service/Agency Program</i>	<i>Installation</i>	<i>Project Title</i>	<i>FY05 Request</i>	<i>Senate Change</i>	<i>Senate Auth</i>
Worldwide	DIA	Unspecified Worldwide	Leasing	30,199		30,199
Worldwide	NSA	Unspecified Worldwide	Utilities Account	471		471
Worldwide	NSA	Unspecified Worldwide	Furnishings Account	116		116
Worldwide	NSA	Unspecified Worldwide	Management Account	13		13
Worldwide	NSA	Unspecified Worldwide	Miscellaneous Account	53		53
Worldwide	NSA	Unspecified Worldwide	Services Account	381		381
Worldwide	NSA	Unspecified Worldwide	Leasing	11,257		11,257
Worldwide	NSA	Unspecified Worldwide	Maintenance of Real Property	1,939		1,939
<b>Total Family Housing: 4,171,596</b>						<b>4,171,596</b>
<b>Total Military Construction and Family Housing 9,480,475</b>					<b>342,465</b>	<b>9,822,940</b>

**Military construction at overseas locations**

The budget request included authorization of appropriations totaling \$657.9 million for military construction and housing projects outside the United States.

The committee recommends a decrease in authorization of appropriations of \$104.4 million for projects outside the United States. The committee recommends deferring certain projects overseas until a global military basing study is completed by the administration. The study, which is being conducted by the Department of Defense in coordination with the Department of State, may propose significant changes to the stationing and posture of U.S. forces worldwide. These changes will necessitate a review and adjustment to operational plans maintained by combatant commanders. Until these reviews are completed and requirements for facilities and infrastructure support are validated, this committee recommends a prudent, reduced investment in overseas installations.





## **TITLE XXI—ARMY**

### **Summary**

The budget request included authorization of appropriations of \$1,771.0 million for military construction and \$1,565.0 million for family housing for the Army in fiscal year 2005.

The committee recommends authorization of appropriations for \$1,942.9 million for military construction and \$1,565.0 million for family housing for fiscal year 2005.

### **Authorized Army construction and land acquisition projects (sec. 2101)**

This provision contains the list of authorized Army construction projects for fiscal year 2005. The authorized amounts are listed on an installation-by-installation basis. The state list contained in this report is the binding list of the specific projects authorized at each location.

### **Family housing (sec. 2102)**

This provision would authorize new construction and planning and design of family housing units for the Army for fiscal year 2005. It would also authorize funds for facilities that support family housing, including housing management offices and housing maintenance and storage facilities.

### **Improvements to military family housing units (sec. 2103)**

This provision would authorize improvements to existing Army family housing units for fiscal year 2005.

### **Authorization of appropriations, Army (sec. 2104)**

This provision would authorize specific appropriations for each line item contained in the Army's military construction and family housing budget for fiscal year 2005. This provision would also provide an overall limit on the amount the Army may spend on military construction projects.

### **Modification of authority to carry out certain fiscal year 2004 projects (sec. 2105)**

The committee recommends a provision that would amend section 2101 of the Military Construction Authorization Act for Fiscal Year 2004 (division B of Public Law 108–136) to increase project authorizations for Fort Stewart, Georgia and Fort Drum, New York.

### **Modification of authority to carry out certain fiscal year 2003 projects (sec. 2106)**

The committee recommends a provision that would amend section 2101 of the Military Construction Authorization Act for Fiscal

Year 2003 (division B of Public Law 107–314) as further amended by section 2105(a)(2) of the Military Construction Authorization Act for Fiscal Year 2004 (division B of Public Law 108–136) to adjust a project authorization for Fort Sill, Oklahoma.

#### **Items of Special Interest**

##### **Planning and design, Army**

The committee directs that the amount of \$3.0 million, added to the authorization of appropriation for planning and design for the Army, be used to carry out design of a tank bypass road at MacGregor Range, New Mexico, and design of a road at Fort Belvoir, Virginia.

## **TITLE XXII—NAVY**

### **Summary**

The budget request included authorization of appropriations of \$1,060.5 million for military construction and \$843.6 million for family housing for the Navy in fiscal year 2005.

The committee recommends authorization of appropriations of \$982.0 million for military construction and \$843.6 million for family housing for fiscal year 2005.

The committee recommends deferring a project to provide facilities for the system development, test, and evaluation of a replacement aircraft for the Presidential Helicopter program at a location not determined by the Navy, based on the announcement by the Navy in March 2004 of an indefinite delay in the selection of the preferred vendor.

### **Authorized Navy construction and land acquisition projects (sec. 2201)**

This section contains the list of authorized Navy construction projects for fiscal year 2005. The authorized amounts are listed on an installation-by-installation basis. The state list contained in this report is the binding list of the specific projects authorized at each location.

### **Family housing (sec. 2202)**

This section would authorize new construction and planning and design of family housing units for the Navy for fiscal year 2005. It would also authorize funds for facilities that support family housing, including housing management offices and housing maintenance and storage facilities.

### **Improvements to military family housing units (sec. 2203)**

This section would authorize improvements to existing Navy and Marine Corps family housing units for fiscal year 2005.

### **Authorization of appropriations, Navy (sec. 2204)**

This section would authorize specific appropriations for each line item in the Navy's military construction and family housing budget for fiscal year 2005. This section also provides an overall limit on the amount the Navy may spend on military construction projects.

### **Modification of authority to carry out a certain fiscal year 2004 project (sec. 2205)**

The committee recommends a provision that would amend section 2201 of the Military Construction Authorization Act for Fiscal Year 2004 (division B of Public Law 108–136) to increase a project authorization amount at Various Locations, CONUS.



## **TITLE XXIII—AIR FORCE**

### **Summary**

The budget request included authorization of appropriations of \$664.0 million for military construction and \$1,710.9 million for family housing for the Air Force in fiscal year 2005.

The committee recommends authorization of appropriations of \$777.0 million for military construction and \$1,710.9 million for family housing for fiscal year 2005.

The committee recommends a decrease of \$18.9 million for two projects at Tyndall Air Force Base, Florida, without prejudice, due to a delay in the scheduled delivery date of F-22 aircraft. The committee also recommends a decrease of \$16.7 million to the Air Force account for planning and design based on a recalculation of design requirements for fiscal years 2006 and 2007.

### **Authorized Air Force construction and land acquisition projects (sec. 2301)**

This section contains the list of authorized Air Force construction projects for fiscal year 2005. The authorized amounts are listed on an installation-by-installation basis. The state list contained in this report is the binding list of the specific projects authorized at each location.

### **Family housing (sec. 2302)**

This section would authorize new construction and planning and design of family housing units for the Air Force for fiscal year 2005. It would also authorize funds for facilities that support family housing, including housing management offices and housing maintenance and storage facilities.

### **Improvements to military family housing units (sec. 2303)**

This section would authorize improvements to existing Air Force family housing units for fiscal year 2005.

### **Authorization of appropriations, Air Force (sec. 2304)**

This section would authorize specific appropriations for each line item in the Air Force's budget for fiscal year 2005. This section would also provide an overall limit on the amount the Air Force may spend on military construction projects.

## **Items of Special Interest**

### **Air Force general officer housing**

The committee commends the Secretary of the Air Force for publishing in August 2002 a comprehensive guide for the management of general officer quarters (GOQs) in response to concerns raised by Congress about the Air Force's management of GOQ requirements.

The guide is intended to ensure all federal laws and funding thresholds are adhered to during the annual maintenance and periodic upgrade of the 267 general office quarters in the Air Force housing inventory worldwide. The guide forms the basis for the Air Force's investment in GOQ's by establishing consistent standards, while maintaining a balance between costs and quality. The Air Force committed significant resources to develop a detailed, long-range investment plan for each GOQ by establishing Individual Facility Profiles. These profiles are updated every three years and approved by both the Chief of Staff and the Secretary of the Air Force.

The committee is concerned that recent notifications to Congress concerning upgrades or replacement of GOQs substantially deviated from the investment strategies approved by Air Force leadership. Also, a memorandum from the Inspector General of the Department of Defense, dated January 23, 2004, to the Air Force Deputy Chief of Staff for Installations and Logistics identified issues that, if not addressed, "may result in misrepresenting GOQ existing conditions and overstating the extent of renovations and replacements needed to eliminate inadequate GOQs." Finally, the Air Force has proposed demolition of houses identified in the guide as eligible for listing on the National Register of Historic Places without coordination with State Historic Preservation Officers in accordance with section 106 of the National Historic Preservation Act (Public Law 89-665, codified as section 470 et seq. of title 16, United States Code).

The committee recognizes that the Air Force will update the GOQ guide in 2005 and has an opportunity to address the concerns raised by the Department of Defense Inspector General. The committee expects that future Air Force construction and repair projects for GOQs will adhere to the investment plan approved by Air Force leadership. The committee requests that the Air Force submit to this committee by October 30, 2005 the following:

- (1) a copy of the updated Air Force GOQ guide;
- (2) a description of changes made to the 2002 Air Force GOQ Guide and the reasons for the changes; and
- (3) a list of the GOQs in the Air Force inventory that are designated as historic structures or are eligible for historic designation.

#### **Inhabited buildings within explosive safety zones**

The committee is concerned that the Air Force has failed to request military construction projects to relocate inhabited buildings currently within explosive safety zones, known as quantity-distance (QD) arcs. Pursuant to Section 172 of title 10, United States Code, the Department of Defense has maintained ammunition and explosive safety standards, which include the minimum distance an inhabited facility will be located from a munitions facility in order to mitigate the risk to the safety and lives of personnel occupying those facilities. The Air Force currently has 66 waivers or exemptions to the Department's distance standard for installations in the U.S., and over 420 waivers at overseas installations. By sustaining these waivers to maintain munitions operations, installation commanders must accept the increased risk to lives and safety from

continued habitation of facilities within QD arcs. Yet, when commanders propose a military construction project to correct the deficiency, that project must compete with other funding priorities.

The Air Force recently notified the committee of their intent to carry out a project using authorities in section 2805 of title 10, United States Code, which allows an unspecified minor construction project up to \$3.0 million to be carried out if the project is intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening. The requirement to relocate the facility away from the QD arc was identified in 1996, but repeatedly and unsuccessfully competed with other Air Force military construction requirements to be included in the Department's annual budget submission. To compensate for a lack of urgency to this requirement, the Air Force relied on an authority that is reserved for projects that cannot be deferred until the next annual budget cycle.

This committee is aware that the Air Force has numerous military construction requirements to correct QD arc deficiencies that pose a risk to the safety and lives of personnel. These projects continue to be omitted from annual budget submissions for military construction due to competing requirements. While the committee is aware that risk-based decisions are an essential reality in military operations, the committee is concerned that the lack of a long-range plan to correct these deficiencies will continue to result in use of special authorities, which should be reserved for urgent, unforeseen requirements. Therefore, this committee directs the Secretary of the Air Force to submit a report by May 1, 2005 describing:

- (1) the Air Force policy for the occupancy of facilities within a QD arc by personnel not supporting munitions storage, maintenance, or operations;
- (2) the number, location, and types of waivers and exemptions to the Department's explosive safety standards currently maintained by the Air Force;
- (3) the installations that do not have explosive site plans approved by the Department of Defense Explosive Safety Board (DDESB); and
- (4) an investment strategy by year, funding amount, and method of correction to eliminate waivers and exemptions to the Department's distance standards and to establish site plans approved by the DDESB.





## **TITLE XXIV—DEFENSE AGENCIES**

### **Summary**

The budget request included authorization of appropriations of \$781.3 million for military construction and \$49.6 million for family housing for defense agencies in fiscal year 2005.

The committee recommends authorization of \$764.2 million for military construction and \$49.6 million for family housing in fiscal year 2005.

The committee recommends a decrease to authorization of appropriations of \$5.5 million for a project to replace the physical fitness center at the Defense Supply Center in Columbus, Ohio due to a lack of validation of the military requirement.

### **Authorized defense agencies construction and land acquisition projects (sec. 2401)**

This section contains the list of authorized defense agency construction projects for fiscal year 2005. The authorized amounts are listed on an installation-by-installation basis. The state list contained in this report is the binding list of the specific projects authorized at each location.

### **Improvements to military family housing units (sec. 2402)**

This provision would authorize improvements to existing defense agency family housing units for fiscal year 2005.

### **Energy conservation projects (sec. 2403)**

This section would authorize the Secretary of Defense to carry out energy conservation projects.

### **Authorization of appropriations, defense agencies (sec. 2404)**

This section would authorize specific appropriations for each defense agency military construction program for fiscal year 2005. This provision also would provide an overall limit on the amount that may be spent on such military construction projects.



**TITLE XXV—NORTH ATLANTIC TREATY ORGANIZATION  
SECURITY INVESTMENT PROGRAM**

**Summary**

The Department of Defense requested authorization of appropriation of \$165.8 million for the North Atlantic Treaty Organization (NATO) Security Investment Program for fiscal year 2005. The committee recommends an authorization of appropriation of \$165.8 million for fiscal year 2005.

**Authorized NATO construction and land acquisition projects (sec. 2501)**

This provision would authorize the Secretary of Defense to make contributions to the North Atlantic Treaty Organization (NATO) Security Investment Program in an amount equal to the sum of the amount specifically authorized in section 2502 of this title and the amount of recoupment due to the United States for construction previously financed by the United States.

**Authorization of appropriations, NATO (sec. 2502)**

This provision would authorize appropriations of \$165.8 million for the United States' contribution to the North Atlantic Treaty Organization (NATO) Security Investment Program for fiscal year 2005.



TITLE XXVI—GUARD AND RESERVE FORCES FACILITIES

Summary

The Department of Defense requested authorization of appropriations of \$589.9 million for military construction in fiscal year 2005 for National Guard and Reserve facilities. This request was amended on March 5, 2004 by the administration due to cancellation of the Comanche helicopter program. The Department’s amended budget request for fiscal year 2005 included \$619.9 million for National Guard and Reserve facilities.

The committee recommends authorizations of appropriations for fiscal year 2005 of \$768.7 million to be distributed as follows:

	<i>Millions</i>
Army National Guard .....	\$371.4
Air National Guard .....	214.4
Army Reserve .....	63.0
Air Force Reserve .....	99.2
Naval and Marine Corps Reserve .....	25.3
<hr/>	
Total .....	773.3

The committee recommends a decrease of \$2.5 million to the authorization of appropriations for the Army Reserve for a project to acquire land at Vancouver, Washington, due to a lack of a military requirement for this land acquisition in advance of any military construction project on this property. The committee also recommends a decrease of \$21.5 million to the authorization of appropriations for the Army Reserve for a project to replace a reserve center at Aguadilla, Puerto Rico due to the availability of other activities to carry out the requirement.

Authorized Guard and Reserve construction and land acquisition projects (sec. 2601)

This provision would authorize appropriations for military construction for the National Guard and Reserve by service component for fiscal year 2005. The state list contained in this report is the binding list of the specific projects authorized at each location.

Items of Special Interest

Aguadilla Army Reserve Center, Puerto Rico

The Secretary of the Navy is currently in the process of satisfying property and facility requirements for other military departments and federal agencies at the former Naval Station Roosevelt Roads, Puerto Rico, prior to the disposal of property in accordance with current laws pertaining to Base Realignment and Closure. Using authorities available in title 10, United States Code, and this Act, the Secretary of the Army is encouraged to work with the Secretary of the Navy to determine whether an agreement can be im-

plemented to exchange facilities or land at Naval Station Roosevelt Roads for a new reserve center at Aguadilla, Puerto Rico.

**Planning and design, Army National Guard**

The committee directs that the amount of \$530,000, added to the authorization of appropriation for planning and design for the Army National Guard, be used to complete the design of a readiness center at Winchester, Virginia.

## **TITLE XXVII—EXPIRATION AND EXTENSION OF AUTHORIZATIONS**

### **Expiration of authorizations and amounts required to be specified by law (sec. 2701)**

This provision would provide that authorizations for military construction projects, repair of real property, land acquisition, family housing projects, contributions to the North Atlantic Treaty Organization infrastructure program, and National Guard and Reserve military construction projects would expire on October 1, 2007, or the date of enactment of an act authorizing funds for military construction for fiscal year 2008, whichever is later. This expiration would not apply to authorizations for projects for which appropriated funds have been obligated before the later of October 1, 2007, or the date of enactment of an act authorizing funding for military construction for fiscal year 2008.

### **Extension of authorizations of certain fiscal year 2002 projects (sec. 2702)**

This section would extend the authorizations for certain fiscal year 2002 military construction projects until October 1, 2005, or the date of enactment of an act authorizing funds for military construction for fiscal year 2006, whichever is later.

### **Extension of authorizations of certain fiscal year 2001 projects (sec. 2703)**

This provision would extend the authorizations for certain fiscal year 2001 military construction projects until October 1, 2005, or the date of enactment of an act authorizing funds for military construction for fiscal year 2006, whichever is later.

### **Effective date (sec. 2704)**

This provision would provide that titles XXI, XXII, XXIII, XXIV, XXV, and XXVI of this Act shall take effect on October 1, 2004, or the date of enactment of this Act, whichever is later.





## **TITLE XXVIII—GENERAL PROVISIONS**

### **Subtitle A—Military Construction Program and Military Family Housing Changes**

#### **Increase in thresholds for unspecified minor military construction projects (sec. 2801)**

The committee recommends a provision that would amend section 2805(a)(1) of title 10, United States Code, by raising the threshold of the cost of a construction project authorized by this section from \$1.5 million to \$2.5 million. This provision would also raise the threshold of the cost of a construction project intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening from \$3.0 million to \$4.0 million.

#### **Modification of approval and notice requirements for facility repair projects (sec. 2802)**

The committee recommends a provision that would amend section 2811(b) of title 10, United States Code, by raising the threshold of the cost of a construction project requiring approval in advance by a service secretary from \$5.0 million to \$7.5 million. This provision would also amend a reporting requirement in this section.

#### **Additional reporting requirements relating to alternative authority for acquisition and improvement of military housing (sec. 2803)**

The committee recommends a provision that would amend section 2884 of title 10, United States Code, to add additional requirements for reports provided by the Secretary of Defense to congressional defense committees. This provision would apply to each contract that the Secretary proposes to solicit under alternative authorities for the acquisition and improvement of military housing provided in subchapter IV of chapter 169, title 10, United States Code.

This provision would also amend section 2884 of title 10, United States Code, to add additional requirements for annual reports provided by the Secretary for contracts carried out using alternative authorities for the acquisition and improvement of military housing.

### **Subtitle B—Real Property**

#### **Recodification and consolidation of certain authorities and limitations relating to real property administration (sec. 2811)**

The committee recommends a provision that would amend sections 2661 and 2679 of title 10, United States Code, to consolidate

and clarify authorities available for real property administration. This provision would also repeal sections 2666, 2670, and 2673 of title 10, United States Code, that would be superceded as a result of the consolidations.

**Modification and enhancement of authorities on facilities for Reserve components (sec. 2812)**

The committee recommends a provision that would amend sections 18231, 18232, 18233, and 18233a of title 10, United States Code, to modify and enhance definitions and authorities available to the Secretary of Defense to provide for the acquisition of facilities and land interests necessary for the proper development, training, operation, and maintenance of the Reserve components of the Armed Forces.

This provision would also amend section 18233 to clarify the applicability of chapters 159 and 169 of title 10, United States Code, to the acquisition of facilities and land interests authorized in this section. The provision would also amend section 18233a of title 10 to reduce the threshold of the value of the acquisition that would require a notification to the congressional defense committees in order to make this threshold consistent with other sections of title 10 that authorize similar activities for the Secretary of Defense in support of Active components of the Armed Forces.

**Authority to exchange or sell Reserve component facilities and lands to obtain new Reserve component facilities and lands (sec. 2813)**

The committee is concerned that the Secretary of the Army has carried out three recent transactions for the Army Reserves to convey government-owned land to a private entity in exchange for new facilities or to add to an existing facility, that exceed the scope of the authorities intended by Congress in chapter 1801 of title 10, United States Code. At the same time, the committee recognizes the benefit to the Department of Defense of certain transactions that would exchange sub-optimized land or deteriorated facilities for new facilities for the Reserve components.

Therefore, the committee recommends a provision that would authorize the Secretary of Defense to carry out projects to assess the feasibility and advisability of obtaining new facilities for the Reserve components through the exchange or sale of existing facilities of such components. The Secretary would be authorized to carry out transactions before September 30, 2006 that either:

- (1) exchange an existing facility or existing land interest for a new facility, land interest, or an addition to an existing facility;
- (2) sell an existing facility, land interest or both and uses the proceeds of that sale to acquire a new facility, land interest, or addition to an existing facility; or
- (3) combine an exchange and a sale of an existing facility, land interest, or both with the use of the exchange allowance and proceeds to acquire a facility or an addition to existing facility.

This provision would authorize the Secretary of Defense to use a facility or land interest that is under the control of the military

department concerned and is not excess property. The Secretary would be required to receive cash, a replacement facility, an addition to an existing facility, or a combination thereof which totals at least the fair market value of the existing facility. The Secretary would be required to determine that the facility or addition obtained in the exchange is complete and useable, fully functional, ready for occupancy, and meets all applicable Federal, State, and local requirements related to health, safety, fire, and the environment. The Secretary would have to make this determination before releasing the existing facility and completing the transaction.

This provision would also require the Secretary to select an entity using competitive procedures if more than one entity expressed an interest in carrying out a transaction at the same location. The Secretary would be authorized to use procedures other than competitive procedures, but only in accordance with section 2304 of title 10, United States Code.

This provision would authorize the Secretary to establish an account to deposit funds from transactions pursuant to this provision, and to use these funds for replacement facilities, additions to facilities, and land interests as proposed in the transaction.

This provision would also require the Secretary of Defense to submit a notification to the congressional defense committees of the nature of the transaction no later than 30 days prior to entering into an agreement. The Secretary would also be required to submit a report on the program to the congressional defense committees no later than December, 31, 2006.

### **Subtitle C—Land Conveyances**

#### **Transfer of administrative jurisdiction, Defense Supply Center, Columbus, Ohio (sec. 2821)**

The committee recommends a provision that would authorize the Secretary of the Army to transfer, without reimbursement, to the Secretary of Veterans Affairs the administrative jurisdiction over a parcel of real property consisting of approximately 20 acres at the Defense Supply Center, Columbus, Ohio, for the sole purpose of constructing a new outpatient clinic for the provision of medical services to veterans.

This provision would require that administrative costs related to the conveyance be paid by the Secretary of Veterans Affairs. The Secretary of the Army would be authorized to exercise the option to resume the administrative jurisdiction over the parcel if the Secretary of the Army determines the parcel is not being used for the purpose intended by this provision.

#### **Land conveyance, Browning Army Reserve Center, Utah (sec. 2822)**

The committee recommends a provision that would authorize the Secretary of the Army to convey, without consideration, to the State of Utah a parcel of real property consisting of approximately 10 acres located at the Browning Army Reserve Center, Utah for the purpose of constructing a nursing care facility for veterans. The provision would also authorize the Secretary of the Army to receive

reimbursement from the State for all administrative costs incurred to carry out the conveyance.

**Land exchange, Arlington County, Virginia (sec. 2823)**

The committee recommends a provision that would authorize the Secretary of Defense to convey a parcel of real property consisting of not more than 4.5 acres at the Navy Annex property, Virginia to Arlington County, Virginia for the purpose of the construction of a freedmen heritage museum and an Arlington history museum. As consideration for the conveyance, the Secretary of Defense would receive all right, title, and interest of the county to a parcel of real property, and improvements thereon, consisting of an equal amount of acreage known as the Southgate Road right-of-way between Arlington National Cemetery and the Navy Annex property.

This provision would authorize the Secretary of Defense to receive reimbursement from the county for all administrative costs incurred to carry out the conveyance. The Secretary of Defense would also be authorized to exercise the option of resuming ownership of the property to be conveyed to the county, if, at any time, the Secretary determined that the property was not being used for the purpose stated in this provision. As consideration, the Secretary would be directed to compensate the county for the fair market value of the property returned to the government.

This provision would also amend section 2881(a) of the Military Construction Authorization Act for Fiscal Year 2000 (division B of Public Law 106–65) to add the parcel of property received by the county to the total number of parcels to be conveyed by the Secretary of Defense to the Secretary of the Army for use by Arlington National Cemetery. This provision would further amend section 2882(b) of the aforementioned Act, as amended by 2863(f) of the Military Construction Authorization Act for Fiscal Year 2002 (division B of Public Law 107–107), by striking the requirement for the Secretary of Defense to reserve not more than four acres of the Navy Annex property as a site for such other memorials or museums that the Secretary considers compatible with Arlington National Cemetery and the Air Force Memorial.

**Land conveyance, Hampton, Virginia (sec. 2824)**

The committee recommends a provision that would authorize the Secretary of the Army to convey, without consideration, to the Hampton City School Board, Hampton, Virginia, a parcel of real property consisting of approximately 29.8 acres, known as the Butler Farm United States Army Reserve Center, for public education purposes. The property would be conveyed in “as is” condition. The provision would also authorize the Secretary of the Army to receive reimbursement from the school board for all administrative costs incurred to carry out the conveyance.

**Land conveyance, Seattle, Washington (sec. 2825)**

The committee recommends a provision that would authorize the Secretary of the Army to convey, without consideration, to the State of Washington a parcel of real property consisting of approximately 9.8 acres in Seattle, Washington and comprising a portion of a National Guard Facility, Pier 91, for the purpose of permitting

the State to convey the facility unencumbered for economic redevelopment purposes. The parcel would be conveyed in its existing condition.

This provision would also authorize the Secretary of the Army to receive reimbursement from the State for all administrative costs incurred to carry out the conveyance.

**Transfer of jurisdiction, Nebraska Avenue Naval Complex, District of Columbia (sec. 2826)**

The committee recommends a provision that would direct the Secretary of the Navy to transfer to the General Services Administration the jurisdiction of a parcel of real property in the District of Columbia known as the Nebraska Avenue Complex. The transfer of jurisdiction would be required to be completed by January 1, 2005. The parcel would be transferred in its existing condition to accommodate the Department of Homeland Security. This provision would also authorize the Secretary of the Navy to retain jurisdiction of a portion of the complex for continued use as Navy family housing.

This provision would require the Secretary of Homeland Security, subject to availability of appropriations, to pay all reasonable costs to relocate Navy activities from the complex. The Secretary of the Navy would be required to submit cost estimates, final cost reports, and a certification that all amounts paid are sufficient to complete all relocation actions.

**Land conveyance, Honolulu, Hawaii (sec. 2827)**

The committee recommends a provision that would authorize the Secretary of the Navy to convey to the city and county of Honolulu, Hawaii, a parcel of real property consisting of approximately 5.16 acres, located at 890 Valkenburg Avenue, Honolulu, Hawaii, in "as is" condition. The parcel is currently used as a site for a fire station and fire training facility for the city and would be conveyed for the purpose of continuing fire protection and training for civilian and military personnel. The Secretary would be required to convey the parcel without consideration, but subject to conditions that the property be accepted by the city and county in "as is" condition, and that the city and county be required to make the fire training facility available to military fire protection and firefighting units not less than two days per week upon terms deemed acceptable by the Secretary of the Navy.

This provision would also authorize the Secretary of the Navy to receive reimbursement from the city or county for all administrative costs incurred to carry out the conveyance.

**Land conveyance, Portsmouth, Virginia (sec. 2828)**

The committee recommends a provision that would authorize the Secretary of the Navy to convey, without consideration, to the City of Portsmouth, Virginia, a parcel of real property consisting of approximately one-half acre, known as the Navy YMCA building, for economic revitalization purposes. The property would be conveyed in "as is" condition and the city would pay all costs related to environmental remediation of the parcel. The provision would also authorize the Secretary of the Navy to receive reimbursement from

the city for all administrative costs incurred to carry out the conveyance.

**Land conveyance, former Griffiss Air Force Base, New York (sec. 2829)**

The committee recommends a provision that would authorize the Secretary of the Air Force to convey, at fair market value, to the Oneida County Industrial Development Agency, New York, a parcel of property at the former Griffiss Air Force Base, New York, consisting of 9.369 acres, including four buildings, for economic development purposes. The property would be conveyed in “as is” condition.

**Subtitle D—Other Matters**

**Department of Defense follow-on laboratory revitalization demonstration program (sec. 2841)**

The committee recommends a provision that would authorize the Secretary of Defense to carry out a follow-on program for the revitalization of laboratories operated by the Department of Defense. Initial authorization for this program was provided under section 2892 of the Military Construction Authorization Act for Fiscal Year 1996 (division B of Public Law 104–106). The authority for the program was extended and amended under section 2871 of the Military Construction Authorization Act for Fiscal Year 1999 (division B of Public Law 105–261).

This provision would increase the threshold in section 2805(a)(1) of title 10, United States Code, to \$3.0 million for unspecified minor construction projects carried out to revitalize defense laboratories. This provision would increase the threshold in section 2805(b)(1) of title 10, United States Code, to \$1.5 million for projects requiring prior approval of the Secretary concerned. This provision would increase the threshold in section 2805(c)(1)(B) of title 10, United States Code, to \$1.5 million.

This provision would require the Secretary of Defense to establish procedures for the review of each project to be carried out under this section, and to report to the congressional defense committees by September 30, 2005 with a list and description of the projects carried out under this program, as well as recommendations for further use. Finally, this provision would provide for the expiration of the authority on September 30, 2006.

**Jurisdiction and utilization of former public domain lands, Umatilla Chemical Depot, Oregon (sec. 2842)**

The committee recommends a provision that would transfer jurisdiction to the Secretary of the Army of various parcels of property consisting of approximately 8,300 acres located at Umatilla Army Depot, Oregon that were withdrawn from the public domain. The Secretary of the Army would combine the transferred real property with other land interests at the Depot for purposes of management and disposal under title II of the Defense Authorization Amendment and Base Closure and Realignment Act of 1988 (Public Law 100–526) and other applicable law.

### **Development of heritage center for the National Museum of the United States Army (sec. 2843)**

The committee recommends a provision that would authorize the Secretary of the Army to enter into an agreement with the Army Historical Foundation for the design, construction, and operation of a facility, or group of facilities, at Fort Belvoir, Virginia for the National Museum of the United States Army. The center would provide facilities for the identification, curation, storage, and viewing by the public of artifacts and artwork of significance to the United States. The Secretary would be authorized to accept funds from the Foundation for the design and construction of the center or to permit the Foundation to contract for the design and construction of the center. The center would become the property of the Department of the Army upon the satisfaction of any and all financial obligations incurred by the Foundation.

This provision would also authorize the Commander of the U.S. Army Center of Military History, under regulations prescribed by the Secretary, to accept gifts for the benefit of the National Museum of the United States Army. The provision would further authorize the Secretary to lease the center to the Army Historical Foundation for revenue-generating activities and other purposes. As compensation, the Foundation would pay the Secretary an amount not to exceed the cost of operating the center.

### **Items of Special Interest**

#### **Central management of installations**

In October 2002, the Secretary of the Army activated the Installation Management Agency (IMA) within the Department of the Army to be solely responsible for management of all Army Active and Reserve installations world wide. The goal of the program was to ensure a standard and equitable delivery of services and resources to each installation, while reducing overhead costs and redundant installation support activities. The IMA is charged with establishing facility base operations support requirements, advocating for resources within the Department of the Army, and funding facility projects and base operations support accounts annually to satisfy requirements. The Secretary of the Navy established a similar organization under the Commander, Navy Installations (CNI), in October 2003.

The committee is concerned that the process for resource allocation by these centrally managed agencies is continuing to result in chronic under funding of facility sustainment and base operating accounts. The ability of installation commanders to respond to urgent mission and facility requirements by quickly reallocating funds at the installation level has been curtailed in favor of a centrally managed decisionmaking process. Installations that require a higher degree of resource allocation due to their unique mission, such as the U.S. Military Academy and the U.S. Naval Academy, are now competing for resources with dissimilar installations.

Therefore, the committee directs the Secretaries of the Army and Navy each to submit a report to the committee by February 1, 2005 that describes:

- (1) the resource allocation and prioritization process for the disbursement of funds to each installation;
- (2) the consideration of the impact of an installation's mission to each Service's overall mission;
- (3) the considerations given to the facility and base operating support requirements for installations with unique missions or substantially greater requirements;
- (4) the authority granted to installation commanders to quickly reallocate local funds to carry out urgent facility and installation support requirements; and
- (5) a comparison and assessment by each major installation of the amount obligated for base operating support and facility sustainment accounts in fiscal years 2003 and 2004.

#### **Payments in lieu of taxes by Defense Finance and Accounting Service**

The committee understands that the Defense Finance and Accounting Service (DFAS) has received legal advice from another agency similarly situated that annual "payments in lieu of taxes" ("PILOT fees") paid since 1995 by one of its Operating Locations constitute a real property tax from which DFAS, as a federal agency, should be exempt. The committee also understands that these payments, which were assessed on a square-footage basis, were intended to cover the costs of water, sewer, fire, police, and ambulance services, and road maintenance, provided to the Operating Location over that period. The committee directs DFAS to enter into negotiations toward a settlement of back payments based on the value of the services provided, and to ensure that any future payments are made on the same basis.

#### **Use of sustainable design standards by the Department of Defense**

Congress encourages the Department of Defense to utilize sustainable building design and construction methods to maximize the efficient use of renewable, recycled, and environmentally sound materials. However, concerns have been expressed that certain rating systems adopted by the Department to assess the standards of sustainable design and construction of facilities may unfairly discriminate against domestic producers of wood construction products. Therefore, the committee directs the Secretary of Defense to submit a report to the committee by June 1, 2005 which describes:

- (1) the standards used by each military department to assess the use of sustainable design and construction methods, including credits provided for products made from renewable materials, as well as recycled materials;
- (2) the extent to which such standards comply with the requirements of Section 6002 of the Resource Conservation and Recovery Act, section 6962 of title 42, United States Code, Executive Order 13101, Office of Management and Budget Circular A-119, and other applicable requirements of law and regulation; and
- (3) the extent to which the standards adopted by each military department unfairly discriminate against the use of products and materials manufactured in the United States.



The committee expects the Secretary to take appropriate action to address any noncompliance with applicable requirements of law or regulation and any unfair discrimination against any U.S. manufactured materials identified during the course of this review.

**Report on the effect of certain facilities activities on allocations or eligibility of military installations for power from federal power marketing agencies**

The committee has been informed that a project involving the conveyance of a utility system under section 2688 of title 10, United States Code, or the acquisition or improvement of family housing under subchapter IV of chapter 169 of title 10, United States Code, may affect the status of a military installation to be eligible for a reduced rate for power purchased from a federal power marketing agency, or to receive an allocation of power from a federal power marketing agency. This change in status would increase the life cycle costs of utilities and housing privatization, thus negating their efficiency as a method to recapitalize defense facilities and infrastructure.

Therefore, the committee directs the Secretary of Defense to submit a report by March 1, 2005 describing the projects for utilities and housing privatization that involve federal power marketing agencies and the implications of these activities on the rates for power charged to military installations by the federal power marketing agencies. The report will include:

- (1) a list and description of each covered project that cannot be implemented due to a determination by a federal power marketing agency that the project would result in a change in eligibility or allocation of power;
- (2) a list and description of each covered project that was implemented without a change in an installation's eligibility or allocation of power from a federal power marketing agency;
- (3) a list of each military installation receiving power from a federal power marketing agency, including for each installation the name of the agency providing power, and the amount of the rate reduction charged by the agency for such power over the rate charged by the agency for power provided to other similar consumers of power; and
- (4) any recommendations that the Secretary considers appropriate for modifications of the provisions of law in order to facilitate covered projects.



**DIVISION C—DEPARTMENT OF ENERGY  
AUTHORIZATIONS AND OTHER AUTHORIZATIONS  
TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL  
SECURITY PROGRAMS**

**Overview**

Title XXXI authorizes appropriations for atomic energy defense activities of the Department of Energy (DOE) for fiscal year 2005, including: the purchase, construction, and acquisition of plant and capital equipment; research and development; nuclear weapons; naval nuclear propulsion; environmental restoration and waste management; operating expenses; and other expenses necessary to carry out the purposes of the Department of Energy Organization Act (Public Law 95–91). This title authorizes appropriations in four categories, which include National Nuclear Security Administration (NNSA); defense environmental management; other defense activities; and defense nuclear waste disposal.

The budget request for atomic energy defense activities at DOE totaled \$16.8 billion, a three percent increase above the fiscal year 2004 appropriated level. Of the total amount requested, \$9.0 billion is for NNSA, of which \$6.6 billion is for weapons activities, \$1.3 billion is for defense nuclear nonproliferation activities, \$797.9 million is for naval reactors, and \$333.7 million is for the Office of the Administrator; \$7.0 billion is for defense environmental management, of which \$6.0 billion is for defense site acceleration completion; \$982.5 million is for defense environmental services; \$663.6 million is for other defense activities; and \$131.0 million is for defense nuclear waste disposal.

The committee recommends \$16.8 billion for atomic energy defense activities at DOE, the amount of the budget request. Of the amounts authorized for the NNSA, \$6.7 billion is for weapons activities, an increase of \$106.4 million above the budget request; \$1.3 billion is for defense nuclear nonproliferation activities, the amount of the budget request; \$797.9 million is for naval reactors, the amount of the budget request; and \$343.7 million is for the Office of the Administrator, an increase of \$10.0 million above the budget request. The committee recommends \$7.0 billion for the defense environmental management activities, an increase of \$1.1 million above the budget request. Of the amounts authorized for defense environmental management, \$6.0 billion is for defense site acceleration completion, an increase of \$1.1 million above the budget request; and \$982.5 million is for defense environmental services, the amount of the budget request. The committee recommends \$568.1 million for other defense activities, a reduction of \$96.0 million below the budget request. The committee recommends \$108.0 million for defense nuclear waste disposal, a reduction of \$23.0 million below the budget request.

The following table summarizes the budget request and the authorizations:

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
<b>Atomic Energy Defense Activities (053)</b>			
<b>Discretionary Summary By Appropriation</b>			
Energy And Water Development Appropriation Summary:			
Energy supply			
<b>Atomic Energy Defense Activities</b>			
National nuclear security administration:			
Weapons activities	6,568,453	106,445	6,674,898
Defense nuclear nonproliferation	1,348,647		1,348,647
Naval reactors	797,900		797,900
Office of the administrator	333,700	10,000	343,700
<b>Total, National nuclear security administration</b>	<b>9,048,700</b>	<b>116,445</b>	<b>9,165,145</b>
Environmental and other defense activities:			
Defense site acceleration completion	5,970,837	1,095	5,971,932
Defense environmental services	982,470		982,470
Other defense activities	663,636	-95,540	568,096
Defense nuclear waste disposal	131,000	-23,000	108,000
Total, Environmental & other defense activities	7,747,943	-117,445	7,630,498
<b>Total, Atomic Energy Defense Activities</b>	<b>16,796,643</b>	<b>-1,000</b>	<b>16,795,643</b>
Defense EM privatization (rescission)			
<b>Total, Energy And Water Development Appropriation</b>	<b>16,796,643</b>	<b>-1,000</b>	<b>16,795,643</b>
<b>Total, Discretionary Funding</b>	<b>16,796,643</b>	<b>-1,000</b>	<b>16,795,643</b>

**Department of Energy National Security Programs**  
(Dollars in Thousands)

FY2005 Request      Senate Change      Senate Authorized

**Energy Supply**

Nuclear Energy

Infrastructure

Idaho facilities management

INEEL infrastructure O&M

Idaho sitewide safeguards and security (050)

Program direction

**Subtotal, Energy Supply**

**Adjustments:**

Less security charge for reimbursable work (NE) (050)

Funding from other defense activities

**Total, Adjustments**

**Total, Energy Supply**

**Weapons Activities**

Directed stockpile work (DSW)

Directed stockpile work

Stockpile research and development

Stockpile maintenance

Stockpile evaluation

Dismantlement/disposal

1,406,435

1,406,435

# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Production support			
Field engineering, training and manuals			
<b>Total, Directed stockpile work</b>	<b>1,406,435</b>		<b>1,406,435</b>
Science campaign	300,962		300,962
Science campaign			
Primary certification			
Dynamic materials properties			
Advanced radiography			
Operations and maintenance			
Secondary certification and nuclear systems margins			449
<b>Total, Science campaign</b>	<b>300,962</b>		<b>300,962</b>
Engineering campaigns			
Operations and maintenance	194,330		194,330
Construction:			
01-D-108 Microsystem and engineering science applications (MESA), SNL, Albuquerque, NM	48,654		48,654
<b>Total, Engineering campaign</b>	<b>242,984</b>		<b>242,984</b>
Enhanced surety			
Weapons system engineering assessment technology			
Nuclear survivability			

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Enhanced surveillance			
Advanced design and production technologies			
Engineering campaigns construction activities			
Operations and maintenance			
Construction:			
01-D-108 Microsystem and engineering science applications (MESA), SNL, Albuquerque, NM			
<b>Total, Engineering campaigns construction activities</b>			
<b>Total, Engineering campaigns</b>			
Inertial confinement fusion and high yield campaign			450
Operations and maintenance	362,034		362,034
Construction:			
96-D-111 National ignition facility (NIF), LLNL, Livermore, CA	130,000		130,000
<b>Total, Inertial confinement fusion and high yield campaign</b>	<b>492,034</b>		<b>492,034</b>
Advanced simulation and computing campaign			
Operations and maintenance	738,032		738,032
Construction:			
01-D-101 Distributed information systems laboratory, SNL, Livermore, CA			
00-D-103, Terascale simulation facility, LLNL, Livermore, CA	3,228		3,228



# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
<b>Total, Construction</b>	<b>3,228</b>		<b>3,228</b>
<b>Total, Adv simulation and computing campaign</b>	<b>741,260</b>		<b>741,260</b>
Pit manufacturing and certification campaign	336,473		336,473
Readiness campaigns			
Operations and maintenance	259,127		259,127
Construction:			
98-D-125 Tritium extraction facility,			
Savannah River Site, Aiken, SC	21,000		21,000
<b>Total, Readiness campaign</b>	<b>280,127</b>		<b>280,127</b>
Readiness Campaign			
Stockpile readiness			
High explosive readiness/assembly campaign			
Non-nuclear readiness			
Tritium readiness			
Operations and maintenance			
Construction:			
98-D-125 Tritium extraction facility,			
Savannah River site, Aiken, SC			
<b>Total, Construction</b>			
<b>Total, Tritium readiness</b>			
<b>Total, Readiness campaigns</b>			

# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Readiness in technical base and facilities (RTBF)			
Operations and maintenance	1,268,152		1,268,152
Operations of facilities			
Operations of facilities, RTBF, Kansas City Plant		20,600	20,600
Operations of facilities, RTBF, Pantex Plant		19,100	19,100
Operations of facilities, RTBF		11,745	11,745
Program readiness			
Special projects			
Material recycle and recovery			
Containers			
Storage			
Nuclear weapons incident response			452
<b>Subtotal, Readiness in technical base and facilities</b>	<b>1,268,152</b>	<b>51,445</b>	<b>1,319,597</b>
Construction:			
05-D-140 Project engineering design	11,600		11,600
various locations			
05-D-401 Building 12-64 production bays upgrades			
Pantex Plant, Amarillo, TX	25,100		25,100
05-D-402 Beryllium capability (BEC) project, Y-12			
National Security Complex, Oakridge, TN	3,627		3,627
04-D-101 Test capabilities revitalization,			
Sandia National Laboratories, Albuquerque, NM			

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
04-D-102 Exterior communications infrastructure modernization Sandia National Laboratories, Albuquerque, NM			
04-D-103 Project engineering and design, (PED) various locations	1,500		1,500
04-D-104 National security sciences building Los Alamos National Laboratory, Los Alamos, NM			453
04-D-125 Chemistry and metallurgy facility replacement project, Los Alamos National Laboratory, Los Alamos, NM	24,000		24,000
04-D-126 Building 12-44 production cells upgrade, Pantex plant, Amarillo, TX	2,600		2,600
04-D-127 Cleaning and loading modifications Savannah River site, Aiken, SC			
04-D-128 TA-18 Mission relocation project Los Alamos National Laboratory, Los Alamos, NM			
03-D-102 National security sciences building Los Alamos National Laboratory, Los Alamos, NM	37,348		37,348

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
03-D-103 Project engineering and design (PED) various locations	15,275		15,275
03-D-121 Gas transfer capacity expansion, Kansas City Plant, Kansas City, MO			
03-D-123 Special nuclear materials component requalification facility, Pantex plant, Amarillo, TX	4,602		4,602
02-D-103 Project engineering and design, various locations	5,250		5,250
02-D-105 Engineering technology complex upgrade (ETCU), LLNL, Livermore, CA	5,400		5,400
02-D-107 Electrical power systems safety communications and bus upgrades Nevada Test Site, NV			
01-D-103 Project engineering and design (PED) various locations	6,000		6,000
01-D-124 HEU materials facility, Y-12 plant, Oak Ridge, TN	64,000		64,000
01-D-126 Weapons evaluation test laboratory			
			454

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Pantex Plant, Amarillo, TX			
99-D-104 Protection of real property (roof reconstruction-Phase II), LLNL, Livermore, CA			
99-D-127 Stockpile management restructuring initiative, Kansas City plant, Kansas City, MO			
96-D-102 Stockpile stewardship facilities revitalization, Phase VI, various locations			455
<b>Total, Construction</b>	<b>206,302</b>	<b>206,302</b>	<b>206,302</b>
<b>Total, Readiness in technical base and facilities</b>	<b>1,474,454</b>	<b>51,445</b>	<b>1,525,899</b>
Secure transportation asset			
Operations and equipment	143,873		143,873
Program direction	57,427		57,427
<b>Total, Secure transportation asset</b>	<b>201,300</b>		<b>201,300</b>
Use of prior year balances			
<b>Total, Secure transportation asset</b>	<b>201,300</b>		<b>201,300</b>
Nuclear weapons incident response	99,209		99,209
Facilities and infrastructure recapitalization program			
Operation and maintenance	291,543	20,000	311,543

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Construction			
05-D-160 Facilities and infrastructure recapitalization program (FIRP), project engineering design (PED), various locations	8,700		8,700
05-D-601 Compressed air upgrades project (CAUP), Y-12, National security complex, Oakridge, TN	4,400		4,400
05-D-602 Power grid infrastructure upgrade (PGU), Los Alamos National Laboratory, Los Alamos, NM	10,000		10,000
05-D-603 New master substation (NMSU) SNL	600		600
04-D-203 Facilities and infrastructure recapitalization program (FIRP), project engineering design (PED), various locations	981		981
<b>Total, Construction</b>	<b>24,681</b>		<b>24,681</b>
<b>Total, Facilities and infrastructure recapitalization program</b>	<b>316,224</b>	<b>20,000</b>	<b>336,224</b>
Safeguards and security			
Operations and maintenance	669,991	10,000	679,991
Operations and maintenance, Y-12		25,000	25,000

# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Construction:			
05-D-170 Project engineering and design, various locations	17,000		17,000
05-D-701 Security perimeter project, Los Alamos, National Laboratory, Los Alamos, NM	20,000		20,000
99-D-132 Nuclear material safeguards and security upgrade project, LANL, Los Alamos, NM	37,000		37,000
<b>Total, Construction</b>	706,991	35,000	741,991
<b>Total, Safeguards and security</b>	6,598,453	106,445	6,704,898
<b>Subtotal, Weapons Activities</b>			457
Adjustments			
Use of prior year balances	-30,000		-30,000
Less security charge for reimbursable work	-30,000		-30,000
<b>Total, Adjustments</b>	6,568,453	106,445	6,674,898
<b>Total, Weapons Activities</b>			
<b>Defense Nuclear Nonproliferation</b>			
Nonproliferation and verification R&D	220,000	25,000	245,000
Operation and maintenance			
Nonproliferation and international security	124,000		124,000

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Nonproliferation programs with Russia			
International materials protection, control and cooperation	238,000		238,000
Russian transition initiative	41,000		41,000
HEU transparency implementation	20,950		20,950
International nuclear safety and cooperation			
Elimination of weapons-grade plutonium production program	50,097		50,097
Fissile materials disposition			
U S surplus materials disposition	184,700		184,700
Russian surplus materials disposition	64,000		64,000
Construction:			
99-D-141 Pit disassembly and conversion facility, Savannah River, SC	32,300		32,300
99-D-143 Mixed oxide fuel fabrication facility, Savannah River, SC	368,000		368,000
<b>Total, Construction</b>	<b>400,300</b>		<b>400,300</b>
Reduction due to delay in program		-25,000	-25,000
<b>Total, Fissile materials disposition</b>	<b>649,000</b>	<b>-25,000</b>	<b>624,000</b>
<b>Total, Nonproliferation programs with Russia</b>	<b>999,047</b>	<b>-25,000</b>	<b>974,047</b>
Offsite source recovery project	5,600		5,600
<b>Subtotal, Defense Nuclear Nonproliferation</b>	<b>1,348,647</b>		<b>1,348,647</b>



# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Adjustments:			
Use of prior year balances			
<b>Total, Defense Nuclear Nonproliferation</b>	<b>1,348,647</b>		<b>1,348,647</b>
 <b>Naval Reactors</b>			
Naval reactors development			
Operation and maintenance	761,211		761,211
Construction:			
05-N-900 Materials development facility			459
building, Schenectady, NY	6,200		6,200
03-D-201 Cleanroom technology facility			
90-N-102 Expended core facility dry cell			
project, Naval Reactors Facility, ID	989		989
<b>Total, Construction</b>	<b>7,189</b>		<b>7,189</b>
<b>Total, Naval reactors development</b>	<b>768,400</b>		<b>768,400</b>
Program direction	29,500		29,500
<b>Subtotal, Naval Reactors</b>	<b>797,900</b>		<b>797,900</b>
Use of prior year balances (Naval reactors)			
<b>Total, Naval Reactors</b>	<b>797,900</b>		<b>797,900</b>

# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
<b>Office Of The Administrator</b>			
Office of the administrator	333,700		333,700
Defense nuclear nonproliferation			
Pajarito Plateau Homesteaders		10,000	10,000
<b>Total, Office Of The Administrator</b>	<b>333,700</b>	<b>10,000</b>	<b>343,700</b>
 <b>Defense Site Acceleration Completion</b> <i>(was Defense Facilities Closure Projects)</i>			
2006 Accelerated completions			
Operation and maintenance	1,251,799	1,095	1,252,894
2012 Accelerated Completions			
Operation and maintenance	1,437,001		1,437,001
Construction:			
04-D-414 Project engineering and design, various locations	3,000		3,000
04-D-423 3013 container surveillance capability in 235-F, SR	20,640		20,640
02-D-402 Cathodic protection system expansion, ID			

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
01-D-416 Waste treatment and immobilization plant, RL	690,000		690,000
<b>Total, Construction</b>	<b>713,640</b>		<b>713,640</b>
<b>Total, 2012 Accelerated Completions</b>	<b>2,150,641</b>		<b>2,150,641</b>
2035 Accelerated Completions			
Operation and maintenance	1,849,512		1,849,512
Construction:			
04-D-408 Glass waste storage building #2, SR	43,827		43,827
03-D-403 Immobilized HLW interim storage facility, RL			461
03-D-414 Project engineering and design, various locations			
<b>Total, Construction</b>	<b>43,827</b>		<b>43,827</b>
<b>Total, 2035 Accelerated Completions</b>	<b>1,893,339</b>		<b>1,893,339</b>
Safeguards and security	265,059		265,059
High level waste legislative proposal			
Operation and maintenance	249,442		249,442
Construction			
05-D-405 Salt waste processing facility, Savannah River	52,000		52,000

**Department of Energy National Security Programs**  
(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
04-D-414 04-02 PED: Sodium bearing waste treatment, Idaho	24,900		24,900
03-D-414 PED: salt waste processing facility alternative, Savannah River	23,658		23,658
<b>Total, Construction</b>	<b>100,558</b>		<b>100,558</b>
<b>Total, High level waste legislative proposal</b>	<b>350,000</b>		<b>350,000</b>
Technology development and deployment	60,142		60,142
<b>Subtotal, Defense Site Acceleration Completion</b>	<b>5,970,980</b>	<b>1,095</b>	<b>5,972,075</b>
Use of prior year balances	-143		-143
Less security charge for reimbursable work			
<b>Total, Defense Site Acceleration Completion</b>	<b>5,970,837</b>	<b>1,095</b>	<b>5,971,932</b>
<b>Defense Environmental Services</b> <i>(was Defense Environmental Management Privatization)</i>			
Community and regulatory support	60,547		60,547
Federal contribution to the uranium enrichment	463,000		463,000
Non-closure environmental activities			
Operation and maintenance	187,864		187,864

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## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Program direction	271,059		271,059
<b>Subtotal, Defense Environmental Services</b>	<b>982,470</b>		<b>982,470</b>
Use of prior year balances			
<b>Total, Defense Environmental Services</b>	<b>982,470</b>		<b>982,470</b>
 <b>Other Defense Activities</b>			
Energy security and assurance			
Energy security	6,100	-6,100	
Program direction	4,500	-4,500	
<b>Total, Energy security and assurance</b>	<b>10,600</b>	<b>-10,600</b>	<b>463</b>
 Office of Security			
Nuclear safeguards and security	143,197		143,197
Security investigations	53,554		53,554
International nuclear analysis		1,500	1,500
Program direction	58,350		58,350
<b>Total, Office of Security</b>	<b>255,101</b>	<b>1,500</b>	<b>256,601</b>
Independent oversight and performance assurance	24,669		24,669
 Civilian radioactive waste management			
Spent nuclear fuel management	21,190		21,190
Program direction	1,060		1,060
<b>Total, Civilian radioactive waste management</b>	<b>22,250</b>		<b>22,250</b>

## Department of Energy National Security Programs

(Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Environment, safety & health			
Environment, safety and health (defense)	99,105		99,105
Program direction	20,414		20,414
<b>Total, Environment, safety and health</b>	<b>119,519</b>		<b>119,519</b>
Office of Legacy Management			
Legacy management	19,194	500	19,694
Worker and community transition	2,500	3,500	6,000
Program direction	13,201		13,201
<b>Total, Office of Legacy Management</b>	<b>34,895</b>	<b>4,000</b>	<b>38,895</b>
Worker and community transition			
Worker and community transition			
Program direction			
<b>Total, Worker and community transition</b>			
Office of Legacy Management			
Nuclear energy			
Infrastructure			
Idaho facilities management			
INEEL infrastructure O&M	20,886		20,886
Idaho sitewide safeguards and security	58,103		58,103
<b>Total, Infrastructure</b>	<b>78,989</b>		<b>78,989</b>
Program direction	33,858		33,858
<b>Total, Nuclear energy</b>	<b>112,847</b>		<b>112,847</b>

# **Department of Energy National Security Programs** (Dollars in Thousands)

	<u>FY2005 Request</u>	<u>Senate Change</u>	<u>Senate Authorized</u>
Defense related administrative support	92,440	-92,440	
Office of hearings and appeals	4,318		4,318
Office of Future Liabilities			
Future liabilities	5,000	-5,000	
Office of engineering and construction management		7,000	7,000
<b>Subtotal, Other defense activities</b>	<b>681,639</b>	<b>-95,540</b>	<b>586,099</b>
Adjustments:			
Use of prior year balances	-15,000		-15,000
Less security charge for reimbursable work (SO)	-3,003		-3,003
Less security charge for reimbursable work (NE)	-18,003		-18,003
<b>Total, Adjustments</b>	<b>663,636</b>	<b>-95,540</b>	<b>568,096</b>
<b>Total, Other Defense Activities</b>			
<b>Defense Nuclear Waste Disposal</b>			
Defense nuclear waste disposal	131,000	-23,000	108,000
<b>Defense Environmental Management Privatization (resc)</b>			
Use of prior year balances (rescission)			

**Subtitle A—National Security Programs Authorizations****National Nuclear Security Administration (sec. 3101)**

The committee recommends a provision that would authorize a total of \$9.2 billion for the Department of Energy (DOE) in fiscal year 2005 for the National Nuclear Security Administration (NNSA) to carry out programs necessary to national security.

**Weapons activities**

The committee recommends \$6.7 billion for weapons activities, a \$106.4 million increase above the amount requested in fiscal year 2005. The committee authorizes the following activities: \$1.4 billion for directed stockpile work; \$2.4 billion for campaigns; \$1.5 billion for readiness in the technical base; \$201.3 million for secure transportation assets; \$742.0 million for safeguards and security; and \$336.2 million for facilities and infrastructure.

**Directed stockpile work**

The committee recommends \$1.4 billion for directed stockpile work, the amount of the budget request. The directed stockpile account supports work directly related to weapons in the stockpile, including day-to-day maintenance as well as research, development, engineering, and certification activities to support planned life extension programs. This account also includes fabrication and assembly of weapons components, advanced concepts, weapons dismantlement and disposal, training, and support equipment.

**Campaigns**

The committee recommends \$2.4 billion for campaigns, the amount of the budget request. The campaigns focus on science and engineering efforts involving the three weapons laboratories, the Nevada Test Site, and the weapons plants. Each campaign is focused on a specific activity to support and maintain the nuclear stockpile without underground nuclear weapons testing. These efforts maintain and enhance the safety, security, and reliability of the existing stockpile. The campaigns are divided into three major categories: science campaigns, readiness campaigns, and engineering campaigns.

**Readiness in the technical base**

The committee recommends \$1.5 billion in readiness in the technical base and facilities (RTBF), a \$51.4 million increase above the budget request. This account funds facilities and infrastructure in the weapons complex to ensure the operational readiness of the complex and includes construction funding for new facilities.

The \$51.4 million increase in RTBF should be used to limit any additional deferred maintenance. This amount includes \$20.6 million for infrastructure upgrades, production space reclamation, safety systems, production capital equipment upgrades, and a computing storage system at the Kansas City Plant. Additionally, this amount includes \$19.1 million for operations of facilities for maintenance projects and equipment replacements at the Pantex Plant.



### **Secure transportation asset**

The committee recommends \$201.3 million for the secure transportation asset (STA), the amount of the budget request. The secure transportation asset is responsible for transportation of nuclear weapons, weapons materials and components, and other materials requiring safe and secure transport.

The committee notes that the demand for secure transportation assets is anticipated to increase to meet both expanding work within the stockpile life extension program and the accelerated cleanup work in the environmental management program. With both of these efforts placing an increased demand on existing assets and the attached security force, the committee is concerned about the adequacy of the planned funding to meet the increased demand in the future. While the fiscal year 2005 budget request included a \$39.8 million increase over the amount appropriated in fiscal year 2004, the future years nuclear security program (FYNSP) for STA drops \$15.3 million below the fiscal year 2005 request in fiscal year 2006 and remains below the fiscal year 2005 request through fiscal year 2009. The committee recommends that DOE increase the amount of funding for STA in fiscal years 2006 through 2009 to meet the increased demand.

### **Safeguards and security**

The committee recommends \$742.0 million for weapons safeguards and security, a \$35.0 million increase above the budget request, and \$160.0 million above the amount appropriated in fiscal year 2004. This amount includes \$25.0 million in security upgrades at the Y-12 National Security Complex in Tennessee, including the consolidation and minimization of material storage and long-term vault solutions.

The weapons safeguards and security account provides funding for safeguards and security at all of the NNSA complex sites. After the attacks of September 11, 2001, the Secretary of Energy developed and issued a new design basis threat (DBT), which added security requirements across the nuclear weapons complex and defense environmental management sites. With increased security requirements, there will be increased budget needs. While the committee is encouraged that DOE included a relatively large increase for safeguards and security in the budget request to meet the new DBT requirements, the future years nuclear security program (FYNSP) for safeguards and security drops \$100.0 million below the fiscal year 2005 request in fiscal year 2006 and only increases at a rate below the cost of inflation through fiscal year 2009. The committee expects DOE to take necessary actions to be in full compliance with the new DBT by the end of fiscal year 2006, as required in the DBT plan, and to remain in compliance thereafter.

The committee recommends that DOE increase the amount of funding for safeguards and security in fiscal years 2006 through 2009 to meet the increased requirements. The committee also encourages DOE to invest in force multiplying construction and technologies to help increase security capabilities and reduce the need to increase security forces, which is much more costly over the life of a facility.

### **Facilities and infrastructure**

The committee recommends \$336.2 million for the facilities and infrastructure recapitalization program (FIRP), a \$20.0 million increase above the budget request. This amount includes \$20.0 million for the purchase of capital items in bulk, such as heating ventilation and air conditioning (HVAC) systems. By making capital purchases in bulk, FIRP will be able to reduce its costs and accelerate the completion of this program. For these bulk capital purchases, the committee expects FIRP to continue to follow its strict, disciplined plan in choosing high priority projects.

The committee has been impressed with the management of FIRP and encourages NNSA to continue to maintain this high level of organization and discipline to revitalize the nation's nuclear weapons complex.

### **Defense Nuclear Nonproliferation Program**

The committee recommends \$1.3 billion for the Defense Nuclear Nonproliferation Program, the amount of the budget request. The National Nuclear Security Administration (NNSA) has management and oversight responsibilities for the nonproliferation programs of the Defense Nuclear Nonproliferation Program. The committee recommends funding for these programs, as follows: \$245.0 million for nonproliferation and verification research and development, an increase of \$25.0 million above the budget request; \$124.0 million for nonproliferation and international security; \$238.0 million for international nuclear materials protection, control and cooperation; \$41.0 million for Russian transition initiatives; \$20.9 million for highly-enriched uranium transparency implementation; \$50.0 million for elimination of weapons-grade plutonium production; \$624.0 million for fissile materials disposition, a decrease of \$25.0 million below the budget request; and \$5.6 million for the off-site source recovery project. The committee notes that continued delays in the commencement of construction activities under the fissile materials disposition program make it unlikely that the Department will be able to fully obligate the budget request for that program in fiscal year 2005. The committee believes that the nonproliferation and verification research and development program is doing valuable work on proliferation detection that would benefit from the additional resources the committee recommends authorizing for this program.

The committee is concerned by the delays in the fissile materials disposition program, as well as in several other cooperative nonproliferation programs with Russia, as a result of a dispute between the United States and Russia over what liability standards should apply to the work under the programs. Continued delays in the fissile materials disposition program will have significant domestic, as well as international, ramifications because work at the U.S. MOX Fuel Fabrication Facility is being delayed to ensure parallelism with the analogous program in Russia. The committee fully supports the goals of the MOX program and urges the Administration to give this matter sustained high level attention with the aim of resolving the dispute as quickly as possible so that reasonable liability standards are established that will be protective of U.S. interests and will allow the program to proceed.

### **Naval Reactors**

The committee recommends \$797.9 million for Naval Reactors, the amount of the budget request.

### **Office of Administrator**

The committee recommends \$343.7 million for program direction for the National Nuclear Security Administration (NNSA), an increase of \$10.0 million above the budget request to settle claims of Pajarito homesteaders. This account includes program direction funding for all elements of NNSA, with the exception of the Naval Reactors Program and the Secure Transportation Asset.

The committee notes the success of the Administrator in reengineering the NNSA federal workforce, including reducing the workforce by 15 percent by the end of fiscal year 2004. The Administrator announced this bold plan with the goal of operating a more efficient and agile program, and removing a layer of federal bureaucracy. The total number of the federal workforce has been reduced from 2,003 workers in fiscal year 2002 to 1,705 workers by the end of fiscal year 2004. The reengineering was not a headquarters directive that only mandated reductions in the field. In fact, NNSA headquarters is leading the reengineering effort with a disproportionately large workforce reduction. In fiscal year 2002, headquarters made up 23 percent of the federal workforce, or 458 federal workers; and by the end of fiscal year 2004 headquarters will make up only 18 percent of the federal workforce, or 315 federal workers. To meet this sharp reduction, NNSA headquarters will make up 47 percent of the total workforce reductions.

### **Defense environmental management (sec. 3102)**

The committee recommends a provision that would authorize a total of \$7.0 billion for the Department of Energy (DOE) in fiscal year 2005 for environmental management (EM) activities, a \$1.1 million increase above the budget request.

### **Defense site acceleration completion**

The budget request included funding for the following activities: \$1.3 billion for 2006 accelerated completions; \$2.2 billion for 2012 accelerated completions; \$1.9 billion for 2035 accelerated completions; \$265.1 million for safeguards and security; and \$60.1 million for technology development and deployment. The committee recommends \$6.0 billion for Defense site acceleration completion, an increase of \$1.1 million above the budget request.

The committee recommends an additional \$1.1 million for the 2006 accelerated completions in the Office of Environmental Management (EM) for the Lynchburg Technology Center (LTC) to inspect and repackage the spent nuclear fuel (SNF) stored in aluminum canisters, including 2.2 kilograms of highly enriched uranium (HEU) from Atomic Energy Commission (AEC) Contract AT (30-1)-3809 and the High Burn-up Program irradiated in the AEC Test Reactor. Additionally, the committee encourages the Department of Energy (DOE) to set forth and implement a plan to inspect and repackage any other DOE legacy materials at the LTC, particularly if it is cost-effective to take care of all of the DOE legacy materials at one time. Finally, the committee encourages DOE to

set forth a plan to transport the DOE legacy materials to other facilities for processing and final disposition.

The committee notes that the fiscal year 2005 budget request for Environmental Management (EM) will be the last full fiscal year authorization and appropriation for cleanup at the Rocky Flats Environmental Technology Site (Rocky Flats), the Fernald Environmental Management Project (Fernald), and the Miamisburg Environmental Management Project Mound Site (Mound). The committee applauds the level of priority and focus DOE and management within the Environmental Management Program have placed on cleaning up these three EM sites decades ahead of the original baseline schedule and at a savings of tens of billions of dollars.

The committee encourages DOE to reach out to the communities at the 2006 closure sites and determine what lessons can be learned to help accelerate cleanup and thereby reduce the safety and health risks at the remaining major EM sites. In 1995, when a few individuals at Rocky Flats, Fernald, and Mound first began discussing closure of these sites as much as 60 years ahead of schedule, there were many more skeptics than believers in the accelerated closure approach. At that time, the contractors were required to merely meet compliance milestones, not to do cleanup. These three sites have proven that by reducing the highest risks first, the risk of exposure to the workers, environment, and communities was reduced, and accelerated cleanup has significantly reduced the life cycle cost.

#### **Defense environmental services**

The budget request included funding for the following activities: \$187.9 million for non-closure environmental activities; \$60.5 million for community and regulatory support; \$463.0 million for the federal contribution to the uranium enrichment decontamination and decommissioning fund; and \$271.1 million for program direction. The committee recommends \$982.5 million for Defense environmental services, the amount of the budget request.

The committee encourages EM to continue to look for ways to reduce as much funding as possible and practical on defense environmental services so that these resources can, instead, be focused on the defense site accelerated completion activities.

#### **Other defense activities (sec. 3103)**

The committee recommends a provision that would authorize \$568.1 million for the Department of Energy (DOE) for other defense activities, \$95.5 million below the budget request.

#### **Energy security and assistance**

The budget request included \$10.6 million for energy security and assistance. The committee recommends no funds for these activities. The operational component for this office was transferred to the Department of Homeland Security (DHS) in fiscal year 2003. The committee does not support using Atomic Energy Act funds for nondefense activities.

### **Office of Security**

The committee recommends \$256.6 million for the Office of Security, an increase of \$1.5 million above the budget request for International Nuclear Analysis.

### **Office of Independent Oversight and Performance Assurance**

The committee recommends \$24.7 million for the Office of Independent Oversight and Performance Assurance. The committee notes that DOE has combined the management of the Office of Security with the Office of Independent Oversight and Performance Assurance into the new Office of Security and Safety Performance (SSP). The committee is concerned that combining these two offices may lead to conflicts of interest between the two formerly separate offices. The committee strongly encourages the Secretary of Energy to work to ensure SSP works to keep its two individual missions separate. The committee is concerned that the administration's request for SSP is being sought separately under the Office of Security and the Office of Independent Oversight and Performance Assurance which adds further confusion to whether the two former offices are in fact being combined.

### **Office of Civilian Radioactive Waste Management**

The committee recommends \$22.3 million for the Office of Civilian Radioactive Waste Management, the amount of the budget request.

### **Environment safety and health**

The committee recommends \$119.5 million for environment, safety and health, the amount of the budget request. The committee notes that \$43.0 million was included in the budget request to maintain the accelerated schedule for the Energy Employee Occupational Illness Compensation Program Act (EEOICPA) activities. The total amount authorized for EEOICPA, including fiscal years 2003 and 2004 reprogrammings, should enable DOE to significantly expedite and complete all of the EEOICPA applications on file with DOE up to the physicians panel by fiscal year 2005, and through the physicians panel by fiscal year 2006.

### **Office of Legacy Management**

The committee recommends \$38.9 million for the Office of Legacy Management (LM), a \$4.0 million increase above the budget request. This increase provides for an additional \$3.5 million for section 3161 of the National Defense Authorization Act for Fiscal Year 1993, worker and community transition program, and this increase also includes \$500,000 for local stakeholders organizations (LSOs), which are established in another section of this bill.

### **Nuclear energy**

The committee recommends \$112.8 million for nuclear energy, the amount of the budget request.

### **Defense related administrative support**

The budget request included \$92.4 million for national security programs administrative support. The committee recommends no funds for these activities. The committee views these administrative support activities as inherently nondefense activities. The committee does not support the use of Atomic Energy Defense funds for nondefense activities.

### **Office of Hearings and Appeals**

The committee recommends \$4.3 million for the Office of Hearings and Appeals, the amount of the budget request.

### **Office of Future Liabilities**

The budget request included \$5.0 million for the Office of Future Liabilities. The committee recommends no funds for the activities of this office. The committee is concerned that DOE is creating this new office to conduct essentially the same type of work being conducted by Environmental Management (EM). The committee strongly encourages DOE to include this function in EM program to avoid the cost and inefficiency of creating a new office.

### **Office of Engineering and Construction Management**

The committee recommends \$7.0 million for the Office of Engineering and Construction Management (OECM), an increase of \$7.0 million above the budget request. The committee notes that major DOE construction projects should receive an independent assessment and cost evaluation to validate the life cycle baseline of major construction projects. In a 2003 assessment entitled "Progress in Improving Project Management at the Department of Energy," by the National Research Council (NRC) of the National Academies, the NRC asserted that "it is critical to the continued improvement of project management in the department to have a project management champion with the authority to assure that the project management viewpoint is expressed in all decisions as well as to guide, support, and develop a professional project management staff across the department, with the ultimate goal of achieving and sustaining excellence in DOE project management." The committee believes OECM should continue to fulfill its role to oversee project management. The committee directs that the Office of Engineering and Construction Management (OECM) activities approved with this authorization will focus only on Atomic Energy Defense funded construction projects.

### **Defense nuclear waste disposal (sec. 3104)**

The committee recommends a provision that would authorize \$108.0 million for defense nuclear waste disposal, a decrease of \$23.0 million below the budget request. The committee does not believe that the combined civilian and defense nuclear waste disposal program can expend the combined budget request level of \$880.0 million in fiscal year 2005, which is a \$110.0 million increase over the combined fiscal year 2004 appropriated level.

**Subtitle B—Program Authorizations, Restrictions, and  
Limitations**

**Limitation on availability of funds for the modern pit facility (sec. 3111)**

The budget request included \$29.8 million for the National Nuclear Security Administration (NNSA) for the Modern Pit Facility. The committee recommends a provision that would prohibit the Secretary of Energy from obligating or expending more than half of the funds available for the Modern Pit Facility until 30 days after the Administrator of the National Nuclear Security Administration submits a report on the requirement for pit production capabilities for the Modern Pit Facility, and one additional report on the stockpile required by the Energy and Water Development Appropriations Act, 2004. The requirement for pit production capabilities shall be developed in consultation with the Department of Defense.

**Limitation on availability of funds for spending plan for advanced nuclear weapons concepts initiative (sec. 3112)**

The budget request for the Department of Energy for fiscal year 2005 included \$9.0 million for advanced nuclear weapons concepts initiative. The committee recommends a provision that would require the Administrator of the National Nuclear Security Administration to submit to the congressional defense committees a report on the planned activities for fiscal year 2005 under this initiative, 30 days prior to initiating such activities. This requirement is virtually identical to the requirement included in the Energy and Water Development Appropriations Act, 2004, to cover funds available in fiscal year 2004.

**Limitation authority to carry out new projects under facilities and infrastructure recapitalization program after project selection deadline (sec. 3113)**

The committee recommends a provision that would amend section 3114 of the National Defense Authorization Act for Fiscal Year 2004 (Public Law 108–136) to permit, on a limited basis, the Administrator of the National Nuclear Security Administration (NNSA) to make modifications to the Facilities and Infrastructure Recapitalization Program (FIRP) baseline, which is to be completed by December 31, 2004. The provision allows the Administrator to make no more than five modifications per fiscal year, and each modification is limited to a specific building, facility, or other improvement at an NNSA site. The provision also prohibits any modifications until 60 days after the congressional defense committees receive both the report required in section 3114(c) setting forth the guidelines on the conduct of the readiness in technical base and facilities (RTBF) program and a list of projects selected for inclusion in the FIRP program as required by section 3114(a). The provision states that nothing should delay the completion of the section 3114(c) report or the completion of the section 3114(a) project selection required by the Act.

While the committee notes that the FIRP program appears to be managed well and the deferred maintenance problems of the past

are being addressed appropriately, the committee remains concerned that the NNSA still has not placed a high enough priority on current and future maintenance and repair requirements under the RTBF program. Funding for the operations of facilities program within RTBF, which focuses on maintenance and repair for the nuclear weapons complex, was reduced in the budget request compared to the fiscal year 2004 appropriated level. When funding for FIRP was first authorized and appropriated, NNSA gave assurances to the committee that it would maintain the infrastructure of the facilities in a responsible manner by keeping up with maintenance and repair requirements annually. The committee expects NNSA to follow through on these assurances by requesting additional funding for the operations of facilities program within RTBF, and by not using that account as a source of funds for reprogrammings or transfers to other accounts.

The committee notes that several of the contracts for nuclear weapons complex facilities are being opened for competitive bids during the next couple of years. The committee encourages Department of Energy to include the issue of future maintenance and repair requirements in the bid, selection, and negotiations process; and to include innovative contract incentives, where possible, which can be included to help ensure a long-term and cost-effective plan for maintaining a robust NNSA infrastructure.

#### **Modification of milestone and report requirements for National Ignition Facility (sec. 3114)**

The committee recommends a provision that would modify and extend the current reporting requirement for the National Ignition Facility (NIF), section 3137 of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107-107), to review all program elements necessary for both achieving ignition and enabling NIF to be a fully functioning facility.

The committee is encouraged by the recent progress in constructing NIF, and the initiation of experiments on NIF in support of science-based stockpile stewardship program (SSP). The results of experiments utilizing the first four beams of NIF are evidence of the value of NIF to the national effort to maintain the nation's nuclear deterrent. These four beams alone constitute the most powerful laser in the world today and a valuable tool for the nation's stockpile stewardship program. NIF's value will only increase as more beams are added over the next several years. The committee notes that without returning to underground nuclear testing, NIF provides a critically important experimental environment, which is necessary to study and adequately understand the reliability, safety, and security of nuclear weapons.

The current reporting requirement requires the Secretary of Energy to report to the congressional defense committees in the event that NIF does not meet any of the construction project major milestones. The NIF reporting requirement does not, however, include information on all of the funding and milestones to make NIF fully operational, including the funds and milestones to design and build the actual target that will hold the experiments on which the 192 laser beams will focus.



The provision recommended by the committee would require the Secretary to identify all milestones necessary to achieve ignition, and report on the progress toward meeting those milestones. The provision would further direct the Secretary to submit a funding schedule to support the full complement of milestones. Given the importance of NIF and ignition to the stockpile stewardship program, the committee directs the Secretary to ensure that NNSA provides adequate funding and support to keep all aspects of NIF on a schedule to be fully operational by 2011.

The committee also notes that the cryogenic target that the Lawrence Livermore National Lab (LLNL) will develop for NIF is based on a new design. The committee directs the NNSA and LLNL to ensure that the new target design is fully peer reviewed before committing to the new design.

**Modification of submittal date of annual plan for stewardship, management, and certification of warheads in the nuclear weapons stockpile (sec. 3115)**

The committee recommends a provision that would change the due date of the annual reporting requirement for the stockpile stewardship program from March 15 to May 1. The first annual report was submitted in 1998. It came about as a result of the need to consolidate, in one place, information relevant to the stockpile stewardship program and to eliminate several overlapping annual reporting requirements. Nine different recurring reports were eliminated, and necessary information consolidated into one annual report. The committee finds the annual report to be a useful document to present the details of the stockpile stewardship program in a classified format. The committee is concerned that with the passage of time the requirements for the annual report may again need to be updated. As a result, the committee urges the Department of Energy to review the various other reporting requirements and to recommend repealing, modifying, or consolidating the other reports and the annual report, as appropriate. The committee does not require reports that overlap or provide duplicate information.

**Defense site acceleration completion (sec. 3116)**

The committee recommends a provision that would authorize the Secretary of Energy to exclude from treatment as high-level radioactive waste stored at the Savannah River Site, South Carolina radioactive material resulting from the reprocessing of spent nuclear fuel. This exclusion would be authorized if the the Secretary of Energy determines (a) the radioactive material does not require permanent isolation in a deep geologic repository for spent fuel or highly radioactive waste pursuant to criteria prescribed by the Secretary in consultation with the Nuclear Regulatory Commission (NRC); (b) to the maximum extent practical, that the highly radioactive radionuclides were removed; and (c) that materials from storage tanks are disposed of in a facility pursuant to a State-approved closure plan, or a permit is issued by the State. The provision would authorize the Secretary to carry out any action at Department of Energy sites with respect to radioactive material resulting from the reprocessing of spent nuclear fuel that is authorized by a closure plan approved by the State, or through a permit

issued by the State. The provision would limit this authority for waste that is transported from the State.

This provision would clarify the authority of the Secretary of Energy to proceed with the accelerated cleanup plan which is important for reducing risk to the workers, the environment, and the community, and is significantly more cost-effective.

**Annual report on expenditures for safeguards and security (sec. 3117)**

The committee recommends a provision that would require the Secretary of Energy to submit an annual report describing the activities and costs of the safeguards and security program at the defense nuclear facilities across the Department of Energy (DOE). The report should include details of the amounts expended annually for safeguards and security by site and program. The committee wants to ensure that there is adequate transparency on how much funding is requested, authorized, and appropriated for safeguards and security, to ensure congressional oversight into this important area.

The report should include current policy, including any modifications adopted during the previous fiscal year, as well as any new initiatives or technologies implemented by the safeguards and security program. In addition, the report should describe the budget, including details by program and by facility.

**Authority to consolidate counterintelligence offices of Department of Energy and National Nuclear Security Administration within the National Nuclear Security Administration (sec. 3118)**

The committee recommends a provision that would authorize the Secretary of Energy to consolidate the counterintelligence offices of the Department of Energy (DOE) and the National Nuclear Security Administration (NNSA) within NNSA. The committee is aware of the Secretary's goals of streamlining the counterintelligence activities at DOE and NNSA, and clarifying and filling any gaps in authority. The committee believes that this provision will allow the Secretary to accomplish that goal.

When the NNSA was created, in large part due to counterintelligence failures at the Department of Energy, careful consideration was given to the best way to protect our nation's nuclear secrets. In the National Defense Authorization Act for Fiscal Year 2000 (Public Law 106-65), Congress decided that, with regards to nuclear weapons activities, the NNSA counterintelligence office should report directly to the NNSA Administrator, the same person who is responsible for the nuclear weapons programs and all of its sensitive information. In fact, it was one of the foundations of the NNSA Act to keep counterintelligence implementation within NNSA. The NNSA was set up to be a semi-autonomous agency to ensure that there would be adequate focus and priority placed on counterintelligence activities.

**Treatment of disposition waste from reprocessing of low-level or transuranic waste (sec. 3119)**

The committee recommends a provision that would authorize \$350.0 million, out of the defense site acceleration completion and defense environmental services, to be expended for activities at the Hanford Site in Washington, the Idaho National Engineering and Environmental Laboratory in Idaho, and the Savannah River Site in South Carolina, to stabilize, treat, or process reprocessed low-level or transuranic waste for disposition. These funds would be authorized only if the Secretary of Energy certifies to the President and Congress that there is adequate certainty of the legality of the disposition pathway at an individual site. The provision would stipulate that funds for activities which the Secretary of Energy does not certify will cease to be available after June 1, 2005.

**Local stakeholder organizations for Department of Energy Environmental Management 2006 closure sites (sec. 3120)**

The committee recommends a provision which would direct the Secretary of Energy to establish local stakeholder organizations (LSOs) to operate in consultation with local elected officials at Department of Energy Environmental Management 2006 closure sites. The committee expects LSOs to be set up to assist with closure of major EM sites only. Of the 2006 closure sites, this would include the Rocky Flats Environmental Technology Site, the Fernald Environmental Management Project, and the Miamisburg Environmental Management Project Mound Site.

The committee is concerned that an effective communication mechanism has not been established between the Department of Energy and local communities to address concerns related to post closure. LSOs will serve as a liaison between local communities and the Department of Energy (DOE), and will be responsible for soliciting public participation and disseminating information to State and local governments, stakeholders, and tribal nations.

The committee believes that community reuse organizations (CROs) have greatly assisted in the communication of information between DOE and local communities during the cleanup of former nuclear weapons complex sites. The committee notes that DOE plans to complete the cleanup of these three former nuclear weapons complex sites by December 15, 2006.

The committee expects the Office of Legacy Management (LM) to serve as the primary point of contact at DOE for the LSOs. When setting up the LSOs, the committee expects LM to include a plan which identifies the anticipated length of duration and funding source for each LSO.

**Report on maintenance of retirement benefits for certain workers at 2006 closure sites after closure of sites (sec. 3121)**

The committee recommends a provision that requires the Assistant Secretary of Energy for Environmental Management to submit a report to the Secretary of Energy on the maintenance of retirement benefits for workers at 2006 closure sites shortly before closure of those sites. The report should include the number of work-

ers at the closure sites which would not receive retirement benefits if the site where they work is closed early; the cost to provide benefits to these workers; and the impact on collective bargaining agreements due to the workers' loss of benefits. The Secretary of Energy would be required to send the report to the congressional defense committees.

The committee is concerned that some workers at 2006 closure sites may not receive pension and health benefits agreed to in the closure contracts if the accelerated closure comes earlier than the December 2006 scheduled closure date. The committee supports the Department of Energy's (DOE) Office of Environmental Management's (EM) effort to accelerate closure at its cleanup sites. Accelerating closure even earlier than the December 2006 closure date could result in savings to the American taxpayer of hundreds of millions of dollars. The committee commends the workers at these sites for their contribution and dedication to accelerated cleanup which will most likely result in the early closure of several cleanup sites.

#### **Subtitle C—Proliferation Matters**

##### **Modification of authority to use international nuclear materials protection and cooperation program funds outside the former Soviet Union (sec. 3131)**

The committee recommends a provision that would amend section 3124 of the National Defense Authorization Act for Fiscal Year 2004 to remove the \$50.0 million limitation on the authority to use international nuclear materials protection and cooperation program funds for projects and activities outside of the former Soviet Union (FSU) to meet emerging proliferation threats. The provision would also clarify that this authority applies only to projects or activities that have not previously been authorized by Congress. This clarification is intended to resolve the concern raised by the National Nuclear Security Administration (NNSA) that the original provision could be interpreted as limiting the total amount of funds that NNSA could spend on projects outside of the FSU. The intent of the original provision was to provide funding flexibility for emerging proliferation threats outside of the FSU, not to limit the funds available for such activities that had previously been authorized through prior budget requests.

#### **Subtitle D—Other Matters**

##### **Indemnification of Department of Energy contractors (sec. 3141)**

The committee recommends a provision that would amend section 170d(1)(A) of the Atomic Energy Act of 1954 to allow the Department of Energy to continue to enter into contracts for indemnification for an additional two years, through December 31, 2006.

**Two-year extension of authority for appointment of certain scientific, engineering, and technical personnel (sec. 3142)**

The committee recommends a provision that would amend section 3161(c)(1) of the National Defense Authorization Act for Fiscal Year 1995 to extend excepted service authority for an additional two years, until September 30, 2006. The committee notes that the current excepted service authority has given the Department of Energy (DOE) hiring flexibility in appointing scientific, engineering, and technical personnel. Since this authority was first created, DOE has been successful in significantly enhancing its technical capabilities. By extending excepted service authority, DOE will have an important tool to acquire and retain a highly talented and motivated workforce.

The committee directs the Secretary of Energy to submit a report to the congressional defense committees, with the budget justification materials for fiscal year 2005, identifying all special hiring authority at DOE and to what extent these hiring authorities have been used.

**Enhancement of Energy Employee Occupational Illness Compensation Program Authorities (sec. 3143)**

The committee recommends a provision that would amend section 3661 of the National Defense Authorization Act for Fiscal Year 2001, Part D of the Energy Employees Occupational Illness Program Act (EEOICPA). The provision would eliminate the following three restrictions: (1) the pay cap on physicians serving on Part D physicians panels; (2) the requirement that the Part D physicians work only on a temporary or intermittent basis; and (3) the requirement for agreements between DOE and States.

The committee notes that there is a backlog of over 20,000 Part D applications. One of the major impediments to reducing this backlog is an inadequate number of physicians willing to review Part D applications. The existing pay cap only provides about half the payment per hour that these physicians can receive elsewhere. Also, retaining the Part D physicians as temporary or intermittent experts often reduces their willingness to review Part D applications since they are unable to incorporate the Part D work into their regular work schedules. The provision would allow DOE to hire doctors as permanent screeners for as long as the Part D application backlog exists, which is estimated to be about three years.

**Support for public education in the vicinity of Los Alamos National Laboratory, New Mexico (sec. 3144)**

The committee recommends a provision that would require the Department of Energy (DOE) to modify the management and operating contract for the Los Alamos National Laboratory (LANL), and to provide up to \$8.0 million per year to the Los Alamos Public School District. In the event of termination of the current management and operating contract for LANL, DOE would be required to include similar language in the new contract. The committee recognizes that due to the extraordinary importance of public education to the ability of the Los Alamos National Laboratory to recruit and

retain highly trained personnel, DOE should address this matter in the LANL contract.

The committee notes that in February 2004, the National Nuclear Security Administration submitted a report to Congress in Support for Public Education in the vicinity of Los Alamos National Laboratory, New Mexico. The report, which was required by section 3172 of the National Defense Authorization Act for Fiscal Year 2003 (Public Law 107-314), was to have DOE study options to provide funding for the Los Alamos public schools. The report notes that federal funding of Los Alamos public schools has been provided since World War II. The primary rationale for the supplemental support has been “to attract and retain the excellent professional staff required to carry out the national security mission of the Laboratory.”

**Review of Waste Isolation Pilot Plant, New Mexico, pursuant to competitive contract (sec. 3145)**

The committee recommends a provision that would direct the Secretary of Energy to use competitive procedures to enter into a contract to conduct independent reviews and evaluations of the design, construction, and operations of the Waste Isolation Pilot Plant (WIPP). The contractor will provide an evaluation with regards to public health and safety and the environment. The contract will be for a period of one year and renewable for four additional years. The provision would require the use of competitive procedures to help ensure the best and most cost-effective contractor be awarded the contract. The competitive process raises the level of innovation and effort for this important health and safety review.

**Compensation of Pajarito Plateau, New Mexico, homesteaders for acquisition of lands for Manhattan Project in World War II (sec. 3146)**

The committee recommends a provision that would establish a fund to settle outstanding claims derived from the acquisition of land for the Manhattan Project. In creating the Manhattan Engineering District, the U.S. Army Corps of Engineers condemned land in New Mexico. The provision would authorize \$10.0 million to settle claims for compensation by Pajarito Plateau homesteaders. The committee notes that the courts, not the Administrator of the National Nuclear Security Administration, may be better equipped to determine the level of compensation for these claims.

**Items of Special Interest**

**Department of Energy recognized**

The committee notes that the Department of Energy (DOE) was ranked first among cabinet-level agencies by the Office of Management and Budget (OMB) in implementing the President’s Management Agenda. The OMB assessment rated agency performance in management practices, including human resources, financial management, and budget and performance integration. The committee applauds DOE for this achievement. Strong leadership and sound management are fundamental to DOE achieving its mission: “[t]o advance the national, economic and energy security of the United

States; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex.” The committee commends DOE and the hard working people at DOE for making this recognition possible.

#### **Protecting sensitive technology at the national laboratories**

The committee is concerned with the potential security risks highlighted by the Department of Energy (DOE) Inspector General’s (IG) audit report entitled: “Safeguards Over Sensitive Technology.” Sensitive technologies include those technologies that have national security importance or can enhance weapons of mass destruction capabilities.

The committee notes that while the DOE IG did not find any direct evidence of sensitive technologies involved in a security lapse, the DOE IG did conclude that “the Department needs to take immediate steps to ensure that its procedures to protect sensitive technology are operating as intended.” Specifically, the DOE IG recommends that DOE establish and implement policies, procedures, and training and performance measures to deal with sensitive technologies. The committee directs the Secretary of Energy to implement the Inspector General’s recommendations to protect sensitive technology.

#### **Rocky Flats Cold War Museum**

The committee notes that the Department of Energy (DOE) is required by section 3181(d) of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107–107) to provide Congress a report on the costs associated with the construction of the Rocky Flats Cold War Museum, and any other issues relating to the development and construction of the museum at the Rocky Flats environmental test site by December 2004. The committee also notes that the museum board of directors has published a feasibility study on alternatives for development and construction of a museum at Rocky Flats. Pending the outcome of the DOE report on the museum and consideration of the museum board of directors feasibility study, the committee strongly encourages the Secretary of Energy to include funding for the museum in the President’s fiscal year 2006 budget request for DOE.

The committee believes that DOE should obtain input from local stakeholders, local governments, and the United States Fish and Wildlife Service for the section 3181(d) report to Congress on the development and construction of the Cold War Museum at Rocky Flats.

#### **Seamless transition from environmental management to legacy management**

The committee notes that as cleanup of the first major environmental management (EM) sites are completed and the sites are closed, new challenges for the Department of Energy (DOE) are emerging. When EM no longer has a presence in the community, DOE will still need to be actively involved. If the nation wants workers, communities, and stakeholders to embrace the accelerated closure concept at other EM sites, then DOE must ensure that

there is a smooth transition at the three major sites scheduled for closure by 2006. These include: the Rocky Flats Environmental Technology Site, the Fernald Environmental Management Project, and the Miamisburg Environmental Management Project Mound Site. DOE has assigned this responsibility to the Office of Legacy Management (LM).

The committee believes it is important for each of the two States with closure sites to have a central clearinghouse to serve as a worker and community response center. The people working at these worker and community response centers need to be prepared to answer questions that the workers will have about such things as their pension and health benefits, and to ensure that there is a continuity of services. There also must be someone who is accountable to the community regarding ongoing environmental stewardship. The committee acknowledges that the personnel at these centers could be federal workers or contractors as long as they are fully responsive to the needs of the local communities.

#### **Special exposure cohorts**

The committee notes that the National Institute for Occupational Safety and Health (NIOSH) is late in publishing its guidelines for designating special exposure cohorts (SEC). Many Department of Energy (DOE) employees, who work at DOE nuclear weapons complex sites, claim that insufficient records exist for NIOSH to conduct dose reconstructions as required by the Energy Employee Occupational Illness Compensation Program Act (EEOICPA). NIOSH officials have indicated that they share this concern in some cases. NIOSH has thus drafted guidelines for the designation of SEC, but has not yet published them. The committee directs NIOSH to publish its guidelines for designating SEC at the earliest possible date.

#### **University Research Program in Robotics**

The committee supports the Department of Energy's University Research Program in Robotics (URPR), carried out by the National Nuclear Security Administration (NNSA). The URPR is a long-standing consortium of universities working on the science of remote systems technologies performing physical tasks in hazardous environments. One of the primary objectives of the URPR is to develop robotics, simulation, and sensing capabilities to ensure the security of the nuclear stockpile. In 2002 the National Research Council of the National Academy of Sciences determined in its report, "Making the Nation Safer," that robotics is one of the most critically needed technologies in the United States. The committee supports NNSA's plan to use \$4.4 million in fiscal year 2005 for the URPR.



## **TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

### **Defense Nuclear Facilities Safety Board (sec. 3201)**

The committee recommends a provision that would authorize \$21.3 million, an increase of \$1.0 million above the fiscal year 2005 budget request, for the Defense Nuclear Facilities Safety Board (DNFSB). The \$1.0 million increase is to assist with increased costs to ensure the Board can retain and hire the technical expertise necessary to protect and enhance safety across the Department of Energy's nuclear weapons facilities.



## **TITLE XXXIII—NATIONAL DEFENSE STOCKPILE**

### **Disposal of ferromanganese (sec. 3301)**

The committee recommends a provision that would revise the limitation on the disposal of high carbon manganese ferro contained in section 3306(a)(3) of the National Defense Authorization Act for Fiscal Year 2002 (Public Law 107–107). The committee notes that high carbon manganese ferro is one of several materials critical to the steelmaking process. Economic conditions have resulted in a steady increase in the demand for steel and steelmaking materials. Therefore, the committee recommends a process to increase the amount of high carbon manganese ferro available for disposal from the National Defense Stockpile.

### **Revisions to required receipt objectives for certain previously authorized disposals from the National Defense Stockpile (sec. 3302)**

The committee recommends a provision that would authorize disposal of excess and obsolete material contained in the National Defense Stockpile.

## **LEGISLATIVE REQUIREMENTS**

### **Departmental Recommendations**

By letter dated March 11, 2004, the General Counsel of the Department of Defense forwarded to the President of the Senate proposed legislation “To authorize appropriations for fiscal year 2005 for military activities of the Department of Defense, to prescribe military personnel strengths for fiscal year 2005, and for other purposes.” The transmittal letter and proposed legislation were officially referred as Executive Communication 6710 to the Committee on Armed Services on March 24, 2004. Executive Communication 6710 is available for review at the committee. Senators Warner and Levin introduced this legislative proposal as S. 2229, by request, on March 24, 2004.

### **Committee Action**

The Committee ordered reported a comprehensive original bill and a series of original bills for the Department of Defense, military construction and Department of Energy authorizations by a recorded vote of 25 yeas to 0 nays.

The roll call votes on amendments to the bill which were considered during the course of the markup have been made public and are available at the committee.

**Congressional Budget Office Cost Estimate**

It was not possible to include the Congressional Budget Office cost estimate on this legislation because it was not available at the time the report was filed. It will be included in material presented during floor debate on the legislation.

**Regulatory Impact**

Paragraph 11(b) of rule XXVI of the Standing Rules of the Senate requires that a report on the regulatory impact of the bill be included in the report on the bill. The committee finds that there is no regulatory impact in the case of the National Defense Authorization Bill for Fiscal Year 2005.

**Changes in Existing Law**

Pursuant to the provisions of paragraph 12 of rule XXVI of the Standing Rules of the Senate, the changes in existing law made by certain portions of the bill have not been shown in this section of the report because, in the opinion of the committee, it is necessary to dispense with showing such changes in order to expedite the business of the Senate and reduce the expenditure of funds.

ADDITIONAL VIEWS OF SENATORS CHAMBLISS, INHOFE,  
COLLINS, GRAHAM (SC), CORNYN, NELSON (NE)

The Committee's bill includes a reduction of two F/A-22s and \$280,200,000 from the fiscal year 2005 President's proposed budget request of 24 aircraft. The President's proposed budget request represents an increase of only 2 aircraft from the 22 aircraft authorized and appropriated in FY04. The Committee's report language states, "To ease production backlog, while maintaining the production rate at that established for the FY04 contract, the Committee recommends a decrease of \$280.2M." The Committee has further stated that the rationale for the cut is to allow delivery of aircraft to catch up with program funding.

The Committee's central argument is that since the F/A-22 program is behind schedule that the program should be funded at the rate the contractor is delivering aircraft, rather than at the rate currently programmed. Although this may make sense on the surface, it does not take into account the facts of how this weapon system, and every weapon system our nation has made, is built and funded.

The Lot 2 aircraft that are behind schedule were authorized and appropriated in FY02 and will start delivering this summer. The Lot 5 aircraft to be funded this year are scheduled to deliver in 2007. Reducing the funding for Lot 5 aircraft in FY05 has no relevance to the current schedule delays and will do nothing to help the contractor recover to schedule.

It is true that, in this bill, the Congress is authorizing a production rate for this program that exceeds the contractor's current capability to produce aircraft. However, that is true of any production program that is in Low Rate Initial Production and is ramping up to Full Rate Production. The Committee is authorizing an annual production rate for deliveries in 2007 in this bill and, of course, the contractor is not currently at that rate today in 2004. That is not a problem and the Committee should not expect that to be the case. What the Committee should expect, and what the contractor continues to demonstrate is an increasing production rate, steadily reduced costs, as well as consistently improving performance by the weapon system.

Some Members of this Committee have stated that a cut of this size to a large program like the F/A-22 will not have any real or long-term affect on the program. Much to the contrary, a cut of two aircraft this year will result in a net reduction of six aircraft over the life of the program. With this cut, the Committee is tripling the damage to the program rather than what the FY05 bill actually states. Cuts like these are not innocent. They cause significant damage to the program and raise costs significantly. The Committee cannot make an adjustment to a program of this size without causing perturbations throughout the production cycle down to

the level of the subcontractor. It is the subcontractor who is paying the price for this cut.

The Committee has also heard the argument that, since the program is behind schedule, that the Air Force cannot spend all the money they are authorized and appropriated. This is incorrect. Funds appropriated in fiscal year 2005 will be obligated within a year of this bill becoming law. The funds will then be available for expenditure through 2009. The program would need to be much further behind schedule to have any chance of these funds not being available for expenditure before expiring. Even if the contractor does not catch up to schedule as projected but remains 8 planes behind for the foreseeable future, the Air Force is at absolutely no risk of being unable to expend these funds before they expire in 2009.

An amendment accepted by the Committee includes bill language which would authorize the procurement of up to 24 F/A-22's if the Air Force and contractor can identify efficiencies in the program, recover to the original contract schedule, and ensure that logistics and spare parts accounts will not be sacrificed to buy additional aircraft.

The F/A-22 entered formal Initial Operational Test and Evaluation last week at Edwards Air Force Base. The F/A-22 will prove to be the most impressive example of American technology ever to take to the skies. But far more importantly, it will dominate the airspace over battlefields, protecting military forces for the next 40 years. We, the undersigned, support full funding, in accordance with the fiscal year 2005 President's proposed budget request, for this program.

SAXBY CHAMBLISS.  
E. BENJAMIN NELSON.  
SUSAN M. COLLINS.  
JOHN CORNYN.  
JIM INHOFE.  
LINDSEY GRAHAM.

#### ADDITIONAL VIEWS OF SENATOR AKAKA

While I support every action that helps support our brave men and women in the armed forces, who are making so many sacrifices as they fight for our freedoms, I am concerned and disappointed by some of the actions we have taken in the Armed Services Committee on the Fiscal Year 2005 National Defense Authorization Act we are reporting to the Senate. My greatest concern lies, as it did last year, in the drastic reductions we have made in the working capital funds of the military services and defense agencies. The National Defense Authorization Act for Fiscal Year 2005 contains reductions of over \$1.6 billion in the working capital funds, cuts that I believe are misguided, harm readiness, and send the wrong message to our troops.

The rationale for these cuts was that the working capital funds have been generating excess cash due to higher-than-projected business to meet wartime demands. This much is true. But at the same time that the funds are generating additional revenue, they are incurring additional expenses. It is somewhat like a department store after a huge sale—the racks are empty and the cash registers are full, but the store has ordered new inventory to refill the shelves. Until the trucks arrive with the goods, cash levels are high. This is the cash that we have cut so drastically in this bill. And the goods we are talking about are not suits or skirts, they are helicopter rotor blades, tank tracks, repair parts for aircraft engines, fuel for military equipment, food, and other items that are crucial to mission success.

The Army estimates, for example, that the Army Working Capital Fund will have approximately \$750 million in cash on hand at the end of May 2004. At the same time, as we report this bill, the Fund has ordered over \$5.5 billion in spare parts and other goods from vendors that have not yet been delivered. Obviously, these bills must be paid, and they will be. But we have compounded the challenge that the Fund managers face.

Some argue that the bills can wait until the Department of Defense receives the supplemental appropriations it has already acknowledged it will need in the next fiscal year. And perhaps they will. But this argument can just as easily be extended to all other elements of the defense budget; instead of deferring known expenses further into the future, I would have preferred instead that we face up to the difficult choices the other decisions reflected in our bill presented. I believe we should have cut programs that were behind schedule or lacked sufficient definition to pay for the higher priorities that were added in this bill instead of choosing to reduce funding for some of the programs in the readiness accounts that have the most direct impact on our forces and their ability to continue to fight in Iraq, Afghanistan, and to protect us here at home. They deserve armored vehicles to protect them in Iraq, but they

also deserve the spare parts they need to keep those vehicles running. When our troops come home, they deserve to have those vehicles repaired, rather than awaiting maintenance from a depot until parts arrive that could have been ordered earlier if the working capital funds had had sufficient cash. We owe them the courage to make tough decisions to ensure that those needs are met now, not when future funds not yet requested may or may not become available.

As ranking member of the Readiness Subcommittee, I have mixed feelings about the actions we have taken in this bill. We have increased funding for some key programs, but at the expense of others whose benefits may be less obvious. Our experience with the Air Force over the last few years has shown that there is a direct correlation between increased spare parts and mission capable rates for aircraft; those spare parts are provided through the Air Force Working Capital Fund. The Navy expects to have only a few days of cash on hand at the end of this fiscal year, and may be forced to bill customers before they actually receive their orders. And the Army faces the situation described above, where its orders exceed its cash on hand by more than 700 percent. Wartime, when we see a great expansion of customer needs for readiness and large fluctuations in required support, is not the time to take on more readiness risk by decreasing cash balances in the working capital funds. It hurts readiness, and it hurts the men and women who serve in uniform.

I am also concerned that the Committee took no action to authorize any of the supplemental funding that we have long argued and that the Department of Defense has acknowledged is needed for fiscal year 2005 to cover the cost of the ongoing military operations in Iraq and Afghanistan. The President has finally recognized the need for additional funding, as the Senate-passed budget resolution has already done, by announcing his intention to submit a budget amendment. By reducing funding for the readiness accounts and failing to provide any supplemental funding for 2005, this bill does not do enough to meet the most pressing needs of our men and women in uniform.

DANIEL K. AKAKA.

